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POLITICAL ECONOMY IN ANCIENT INDIA

(Based on Vedas, Smritis, Epics & Kautilya's Philosophy)

By

BHAGWAN SAHAI MUDGAL

M.A., M. COM., PH. D.

Department of Commerce, D. A. V. College,

KANPUR.

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Dedicated to my respected teacher
Col. K. P. Bhatnagar, M. A., LL.B.
Vice-chancellor, Agra University,
AGRA.

With whose able guidance, affectionate
encouragement and timely assistance
it has been possible to bring out
the book.

PREFACE

The world, to-day, is at the cross-roads of economic ideas and political ideologies. In India also, all resources are being geared up to raise the country from economic backwardness and place it on the road to progress and prosperity. At such a time, it may be profitable to analyse the economic concepts and conditions of ancient India as reflected in the Vedas, the Smritis the Epics and other literature of the times.

In the Western interpretation of History of Economic Thought, there is practically no recognition of the contribution made by the ancient Indian economic thinkers. Even after centuries of scholarship, Kautilya remains most often misunderstood by the Western scholars. This lack of understanding may be partly due to the fact that several significant principles of Political Economy are mixed up with teachings on morals and religion and hidden in the haze of legends and myths and partly due to the difficulty of language. It is gratifying to note that the Indology Committee, under the chairmanship of Prof. Humayun Kabir, Union Minister for Scientific Research and Cultural Affairs, has accepted in principle the idea of setting up a Central Institute of Indology to co-ordinate and promote research work in its various fields. In this connection, the Committee's decision to publish a new critical edition of Kautilya's Arthashastra, in view of its great cultural and historical value, with extracts from different commentaries, both ancient and modern, is most welcome.

A scientific analysis of economic concepts propounded by the great thinkers of the Vedas, the Smritis, the Epics and Kautilya's Arthashastra may enable us to critically examine the modern theories of Political Economy and pave the way for the determination of proper economic policies for the future. In this book, an attempt has been made to present, as far as possible, a complete and co-ordinated picture of the social, political and economic life in ancient India and to discuss the fundamental principles guiding the conduct of princes and people during those days in different walks of life. The aim of such an analysis is not merely to believe blindly or to live completely on the intellectual leavings of the past thinkers, but to adjust, amend and apply them in the new set-up of the country and thus to bring about a broad synthesis between the old and the new.

The whole work has been divided into fifteen chapters, comprising a study of different topics and covering almost all the important sectors of National Economy. The introductory

chapter deals with the general nature of the subject, India's rich heritage, the division of the whole field of human knowledge in ancient India into four categories and the place of 'Varta' in such a set-up. In the second chapter, structure of society and social standards have been discussed, wherein the application of Varna-Ashram principle and the concept of 'sarvodaya' for maximising social good find a prominent place.

In the third chapter, light has been thrown on the democratic set-up, an ideal government with special reference to the concept of a welfare state in ancient times. It gives a good idea of the role of the state in different periods of economic history at home and abroad.

Agriculture and Land Policy together with cattle wealth and dairying, the bulwark of India's National Economy since times immemorial, have been discussed with their exhaustive details in chapters four and five, while chapter six deals with the ancient arts and crafts together with their technical knowledge and efficiency.

Labour Problems, in their various aspects, have been dealt with in chapter eight.

The concept of wealth, both ancient and modern, together with its methods of accumulation and distribution as well as an idea of fair distribution have been dealt with exhaustively in chapter ten.

Systems of coinage and currency, principles of banking and control of credit have given their proper place in chapter eleven, while the importance of sound finances and the multiplicity of taxes, even in ancient times in India, have been brought to light in chapter eleven. This chapter gives an idea of different methods of raising emergency finance in times of national calamity and is a true index of the different canons of taxation pointed out by the ancient thinkers of India. The chapter also deals with the problem of Financial Administration in ancient India and the methods discussed by Kautilya have an importance of their own for the national exchequer.

Efforts have been made to do justice to the problem of war economy and restoration of peace in a conquered country as discussed in chapter thirteen, while the modern concept of planning has not been left untouched in the next chapter. Planning of cities and villages, both ancient and modern, have been discussed in a comparative way in the fourteenth chapter.

The last chapter furnishes a summary of the different topics discussed and gives a glimpse of the social, political and economic life in ancient India.

The subject-matter of this study was first suggested to me for the Ph. D. degree of the Agra University by my respected teacher Col. K. P. Bhatnagar, Vice-Chancellor, Agra University, who kindly encouraged me in the project and for which I feel highly grateful to him. Dr. M. P. Mathur M. A., Ph. D. Principal M. B. College, Udaipur and formerly Head of the Department of Economics, D. A. V. College, Kanpur, worked as my supervisor for the Ph. D. degree. I am grateful to him for the useful guidance and suggestions. I am also grateful to Dr. M. R. Sharma, M. A., D. Litt., Head of the Hindi Department, D. A. V. College, Kanpur who, with his profound knowledge of Vedic Literature and other Sanskrit texts, has given me many valuable suggestions. I have had the privilege of discussing with him a number of problems connected with my work.

It would be too much for me to claim complete originality and perfection in a work of this kind and I must acknowledge my deep debt of gratitude to several eminent authors whose works I have consulted and quoted in my book to substantiate my views. Nevertheless, I feel confident that the book contains several original contributions which, I hope, will be found quite interesting and instructive. All the important statements, made in the book, have been fully documented by references to Sanskrit texts and all conclusions are based on the study of original sources.

I must appreciate the hard work put in by my sister's son, Mr. Jagpal, and my daughter Kumari Lakshmi in preparing the manuscripts, looking into the typed copies and the printed proofs. I am thankful for the Management of the Citizen Press for their sincere co-operation in expediting the work of printing successfully, though some minor mistakes of printing have crept inadvertently into the Sanskrit text for which I crave the indulgence of my readers.

My labour would be amply rewarded if this humble work could enable the Western economic thinkers to understand India's viewpoint in this regard and if it could bring about a synthesis between the Eastern and Western values. This synthesis may inspire some to propound new theories which may bring greater happiness and prosperity to mankind.

An assistance of Rs. 2,000/- sanctioned by the Executive Council of Agra University for the publication of this research work is gratefully acknowledged.

B. S. Mudgal.

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ओ३म् विश्वानि देव सवितर्दुरितानि परासुव ।

यद् भद्रं तन्न आसुव ॥

(यजु० ३०।३)

आ ब्रह्मन् ब्राह्मणो ब्रह्मवर्चसी जायतामा राष्ट्रे
राजन्यः शूर इषव्योऽतिव्याधी महारथो जायतां
दोग्ध्री धेनुर्वोढानड्वानाशुः सप्तिः पुरन्धिर्योषा
जिष्णू रथेष्ठाः सभेयो युवास्य यजमानस्य वीरो जायतां
निकामे-निकामे नः पर्जन्यो वर्षतु फलवत्यो
न ओषधयः पच्यन्तां योगक्षेमो नः कल्पताम् ॥

(यजु० २२।२२)

सुखस्य मूलं धर्मः ॥ धर्मस्य मूलमर्थः ॥

अर्थस्य मूलं राज्यम् ॥ राज्यमूलमिन्द्रियजयः ॥

अलब्धलाभो नालसस्य ॥ अर्थेषणा न व्यसनेषु गण्यते ॥

अर्थतोषिणं श्रीः परित्यजति ॥ आर्यवृत्तमनुतिष्ठेत् ॥

(चाणक्य प्रणीत सूत्राणि)

CHAPTER I

INTRODUCTORY

गिरयस्ते पर्वता हिमवन्तोऽरण्यं ते पृथिवी स्थोनमस्तु ।
यस्यां समुद्र उत सिन्धुरापो यस्यामन्नं कृष्टयः सम्बभूवुः ।
यस्यामिदं जिग्वति प्राणवेजत् सा नो भूमिः पूर्वपेये दधातु ॥
जनं बिभ्रती बहुधा विवाचसं नानाधर्माणं पृथिवी यथोक्तम् ।
सहस्रं धारा द्रविणस्य मे दुहां ध्रुवेव धेनुरनपस्फुरन्ती ॥
—अथर्व ० १२।१

काले तपः- काले ज्येष्ठं काले ब्रह्म समाहितम्
कालो ह सर्वस्येश्वरो यः पितामहीत् प्रजापतेः

—अथर्व ० ११।५३

Natural environments have a profound influence on the growth of human civilisation. History of a Nation is to a large extent shaped by its physical and geographical features. The natural conditions provide a background for the drama of social and political behaviour of the people. That is why the countries which are gifted with plentiful bounties of Nature have considerable scope for attaining magnificent heights in their economic and social aspirations. Economic evolution of a community is thus chiefly dependent upon physical environments. History of human civilisation, for instance, bears testimony to the fact that River Valleys have been the cradles of our civilisation. Rivers in most of the countries of the world have provided highways of civilisation from times immemorial.

Physical environments of a country not only provide a basis for the development of a nation's economic, legal, political and ecclesiastical institutions, but they also determine the ideals of people and mould the entire philosophical and psychological texture of men. For instance, while Egypt is truly called the gift of the Nile, the Himalayas are the true sentinels of India. The Himalayas have been entwined in the life of our race from the dawn of history and have not only affected our politics and economics, but have also been a source of inspiration of our art and literature, mythology and religion of the people of India. Probably nowhere in the world have any mountain-ranges played

such an important part in the development of a race as the Himalayas have done in India for thousands of years. The Himalayas have been the great protectors of Indian race and culture. The Vedic hymns also point out the effect of mountains and rivers on the growth of culture and civilisation in a country¹. Economic doctrines have flown out of the stream of the philosophical trends of society. Rivers and mountains, climate, soil, mineral wealth, flora and fauna of our country have exercised a profound influence on the growth of economic ideas and ideals from times immemorial.

Human Element

It is not only the physical condition which gives shape to the material and cultural growth of a nation, but human element also exercises a dominating influence on the progress of civilisation. Human factor which is the architect of social environment cannot be ignored in the growth of a nation. It is due to human ingenuity that oceans have been spanned and mountains have been penetrated. Man has conquered air and mighty forces of Nature and has harnessed them to his service. Proper exploitation of natural resources depends both on the quantity and quality of the people. In India, although we find that Nature has been bountiful and has provided splendid opportunities, people have not made adequate efforts to harness the available resources in a scientific manner. There is not much exaggeration in the saying that India is 'a rich country inhabited by poor people.' In spite of the best efforts of the people and Government during recent years, the poverty level of the nation has not so far gone down substantially.

If it can be claimed that America is bountiful, it would not be an exaggeration to believe that India is both bountiful and beautiful. So far as our mineral resources are concerned, there is considerable room for profitable exploitation. We have wonderful Natural Resources for developing water power in which lies the future prosperity of our country. In the words of President Eisenhower, "Work and wealth abound in America. Commerce crowds its rivers and rails, skies, harbours and highways. The soil is more fertile there and agriculture more productive. The air rings with the song of industry—rolling mills and blast furnaces, dynamos, dams and assembly lines—the chorus of

(१) उपहृदये गिरीणां संगमे च नदीनाम् । विद्या विप्रो भजायत् ।

यजु० २६/१५

America the bountiful.” India is not far behind America so far as water power is concerned, but unfortunately our economic resources are not so well developed. The fact is that the people of our country are not so advanced as the Americans. It is after all the quality of the people that matters most in raising the prestige of a nation. To emphasize importance of quality, it has been well said in a Sanskrit verse that one meritorious son is better than a hundred foolish ones; the moon alone dispels darkness from skies which hundreds of stars cannot do.¹ Probably it was in this very sense that Napoleon once said, “It is not the men but a man that decides the fate of a battle” and the truth of this dictum can hardly be challenged. Was it not for the difference in the calibre and character of the people that a handful of Britishers from an island thousands of miles away ruled over a sub-continent like India inhabited by teeming millions for almost two centuries. A great country like India with vast natural resources was subjected to the will of the rulers living in an island several thousands of miles away. It was due to the untiring efforts of our intellectual giants that foreign rule was given a shake and ultimately liquidated. The following Chinese proverb clearly emphasizes the importance of human factor :—

“If you are planning for a year plant grain;

If you are planning for ten years plant trees;

But if you are planning for hundred years plant men”. In fact there are two aspects of human factor itself—the physical and the intellectual. Man in his effective existence is nothing but a bundle of thoughts and his man-hood consists in the possession of the thinking faculty. It is more through his philosophy that he affects himself, his family, the society, the state and the world either for the better or for the worse. Thoughts and deeds are inseparable in individuals as well as in societies, but thoughts precede action and both together bring success in life.

Most men and women without intellect are like kites flown by the intellectuals who hold the strings. No sacrifice would be too great in the pursuit of intellectual progress of a nation. The

१. वरमेको गुणी पुत्रो न च मूर्खं शतान्यपि,
एकश्चन्द्रस्तमो हन्ति न च तारागणाञ्चपि,
एकेनापि सुवक्षणेण पुष्पितेन सुगन्धिना,
वासितं तद्वनं सर्वं सुपुत्रेण कुलं यथा

चाणक्य नीति

general intellectual level of our country is far from satisfactory and that is why we have lagged behind other nations. Knowledge is really a great power as has been emphasized by Chanakya and Vidura the great thinkers. The intellectual progress of a nation is to be measured by results in original thoughts.

A look back on the history of the world would make it evident that different philosophical trends and theories in different ages in the field of theology, politics and economics have had a considerable influence not only upon the opinions of men of learning, but also upon the public conduct of princes and sovereigns with their far reaching consequences upon the general welfare of the society. History of a nation depends upon the philosophy of the intellectuals. The French Revolution was engineered by great scholars and publicists like Voltaire, Montesquieu and Rousseau who had been criticising the then existing social order in France. As in France so in Russia, the intellectuals have guided the destinies of the people. Karl Marx and Engels were the founders of economic theories which moulded the entire political and economic outlook of leaders like Lenin and Stalin. In Greece Plato's philosophy gave a vision of the 'ideal' city state to the Greeks. Similarly Machiavelli gave a new political outlook to the Italians of his times. In ancient India, the philosophy of Vedic seers and sages of the Upanishads created an inspiration which brought out ideal kings like Rama and Krishna who were the true embodiments of Aryan culture. As a result, these two great national heroes of India, whom the vast majority of Indians worship like incarnations of God, have been the central figures in ancient Indian history. These two divine figures were responsible for creating a high sense of justice and righteousness. The political philosophy of Manu as given under 'Raj Dharma' section of his Smriti has guided many a sovereign in India for generations together. In the link of such philosophers in ancient India, we have another outstanding personality namely Kautilya or Chanakya who is regarded as

(१) बुद्धिर्बलं तस्य निबुद्धेऽत्र कुतोऽबलम् ।

यन्निहो मर्दोन्मत्तः शशकेन निपातितः ॥

चाणक्यमीति

यद् बलानां बलं श्रेष्ठं तत् प्रज्ञाबलं मुख्यम् ॥

बुद्धिः श्रेष्ठानि कर्माणि बाहुमध्यानि भारत ।

तानि जङ्घा जघन्यानि भारप्रत्यवराणि च ॥

यस्मिन् देवाः प्रयच्छन्ति पुरुषाय पराभवम् ।

बुद्धिः तस्यापकर्षन्ति सोऽवाचीनानि पश्यति ॥

—महाभारत—प्रज्ञानर पर्व ।

an ideal friend and counsellor of the first Mauryan Emperor Chandra Gupta. It was under the able guidance and directing mind of Chanakya that the last King of Nanda dynasty was overthrown and Chandra Gupta became the emperor. Asoka, the Imperial patron of Buddhism, whose Dharma Chakra we still honour on our national flag, was subjected to the influence of ideas of great Buddha. After this influence the whole kingly activity of Asoka lay in the sphere of Dharma—moral exhortations addressed to his people to practice simple virtues of life.

It is evident, therefore, that a harmony between adequate natural resources and capable human beings brings about greatest possible progress and prosperity in economic, social and political spheres of a nation. The course of events in India's colourful history clearly bears out that intellectual enlightenment of the people goes a long way in establishing a rule of justice and fair-play. However, with the march of time there may be considerable variations in the relationship between mankind and nature. With a fall in the intellectual level of the nation, there may be degradation of the people. This degradation may go with a change in the philosophy which may be preached by an eminent leader and thus there may be a revival of ancient glory on account of a change in human element.

The Titan of Time has effaced the great thinkers and big empires in the world. A number of empires have flourished in India and have perished in course of time. They grew up with all gorgeousness and have gone into oblivion, the latest being the case of the British Empire. During recent history, our country which was proud of her ancient glory was brought under the yoke of foreign domination and our people fell into the clutches of want, misery and degradation. Again there was a turn in the cycle of time. under the wise guidance of our intellectual leaders during recent years, India is again heading towards economic and social revitalisation steadily and gradually and is moving in a planned manner towards the goal of economic prosperity.

India's Rich Heritage

In spite of the onslaught of time, Indian civilisation has withstood like a rock in the bellowing sea. This is mainly because of the sound foundations of our civilisation which are cemented by some fundamental truths, some basic vitality and some human understanding of life. No doubt, the splendid panorama of India's culture became dim under foreign domina-

tion. Since the shaking off the alien burden of our nation the grandeur of our ancient standards has been gradually coming to limelight. The different empires brought the streams of foreign culture in our country but those streams were merged into our own river of civilisation. The flow of our culture has been too strong to be got over by out-side streams. At the same time our nation has been tolerant towards alien thought and civilisation. We have not only accommodated the foreign elements in our society, but have also assimilated them and have made them our own. According to Prime Minister Nehru, 'we have to be proud of India not because of her ancient magnificent heritage but also because of her remarkable capacity to add to it by keeping the doors and windows of her mind and spirit open to fresh and invigorating winds from distant lands. India's strength has been two-fold; her own innate culture which flowered through the ages and her capacity to draw from other sources and those add to her own. There is a continuing synthesis in the growth of this variegated and yet essentially unified culture of our country'. Prof. Max Muller, the famous German scholar and orientalist, while paying tribute to India's culture said in his lectures delivered before the University of Cambridge in 1882:—

"If I were to look over the whole world to find out the country more richly endowed with all the wealth, power and beauty that Nature can bestow—in some parts a very paradise on Earth—I should point to India. If I were asked under what sky the human mind has fully developed some of its choicest gifts, has most deeply pondered on the greatest problems of life and has found solutions of some of them which will deserve the attention even of those who have studied Plato and Kant—I should point to India. And if I were to ask myself from what literature we have in Europe, we who have been nurtured almost exclusively on the thoughts of the Greeks and Romans and of one Semetic race, the Jewish, may draw that corrective which is most wanted in order to make our inner life more comprehensive, more universal, in fact more truly human, a life not for this life only but a transfigured and eternal life—again I should point to India". This was spoken about our ancient motherland—Aryavarta and to the people of the country he referred as follows :—

"Our nearest intellectual relatives, the Aryas of India, the framers of the most wonderful language, the Sanskrit, the fellow-workers in the construction of some fundamental concepts, the fathers of the most natural of natural religions, the makers

of the most transparent mythologies, the inventors of the most subtle philosophy and the givers of the most elaborate laws”.

Nearly half a century later Romain Rolland wrote in the same strain:—

“If there is one place on the face of the Earth where all the dreams of living men have found a home from the very earliest days when man began the dream of existence, it is India”.

It is difficult to analyse exhaustively the causes and sources of India's strength in the past and later on her decay. The alien thought and culture encroached a good deal upon the sanctity of Indian civilisation. Many social, political and economic evils crept into Indian society, but Indian culture and civilisation boldly stood up against all storms and maintained her tradition and respect. There can hardly be any other country of the world which can be compared to India in regard to the antiquity and continuity of her culture and civilisation. This spirit of Indian civilisation is quite evident from the fact that within a decade of the achievement of freedom from foreign rule, India offered to the world the Panch Shila—the five fundamental principles of co-existence. The Panch Shila is the essence of our culture and civilisation and aims at not only lessening the nervous tension emanating from hatred and distrust between nations but also at the establishment of Peace, Progress and Prosperity of all.

A review of the past is not always a mere gratification of an idle curiosity, but sometimes the present cannot be explained without the help of the past. A renaissance is possible if we get to the creative principles of the past and apply them to new surroundings.

Ours is an ancient country and our history stretches back thousands of years before England and America were heard of. But we have not to indulge in mere vanity over the past. The past should not become a deadweight on us and our aim should be the discovery of the truth for the welfare of people. We have to apply our minds fearlessly and without prejudice to the study of all evidence literary or historical and handle the same with the spirit of a judge rather than an advocate. The essence of India's heritage lies in ‘Satyam, Shivam, Sundaram,’ the details of which embody in full the Values of Truth, Goodness and Beauty for human welfare.

Leaders of Thought

The 19th century had seen the birth of many intellectual giants in our country namely Rabindra Nath Tagore, Ramesh Chandra Dutt, Mahadeo Govind Ranade, Bal Gangadhar Tilak, Dada Bhai Naoroji, Gopal Krishna Gokhale, Maharshi Daya Nand and Mahatma Gandhi who could critically examine the achievements of India's past and contributed new ideas in the field of literature, politics and Economics. The earlier reformers like Raja Ram Mohan Roy, Keshav Chandra Sen, Swami Ram-Krishna and Swami Viveka Nand were the heralds of a new age. The list is not exhaustive and in the field of industry a number of pioneers have contributed substantially towards India's economic progress. Among our leaders of thought Maharshi Dayanand and Mahatma Gandhi had that force of conviction and the strength of mind which aroused India's People from their inertia and slumber and awakened a consciousness of human rights and duties among masses. Both of them followed fearlessly, truthfully, with simplicity and austerity all that was good in our culture and civilisation. They wanted us to study the best literature of the past, to pursue all that is best in the present and be ready for all that might be the best for the future. While swami Daya Nand mostly concentrated on a new and enlightened interpretation of Vedic religion and literature, Mahatma Gandhi developed a new political, social and economic philosophy for the country. They threw light towards the path of justice and fair play which could raise the society to higher economic and social standards. No doubt, ends were to be achieved, but they were not to be achieved by unfair means. If means are fair, ends are worth accepting. Both of them discovered some fundamental truth regarding social and economic conditions in India. They drew inspiration from ancient Indian literature. In fact Gandhi's economic ideas have acquired a place of their own in the modern Indian economic thought. With Mahatma Gandhi's leadership the reform movement in the country reached its climax. He made an attempt at a broad synthesis between the Eastern values and Western ideals, between Tolstoy and Buddha, between the old and the new.

The Background

In India the study of wealth emerged very early as a special branch of learning under the name 'VARTA' meaning thereby National Economy. Varta could crystallise as a branch of learning most probably in the epic period, because we find

its reference both in the Ramayan as well as the Mahabharat¹. Kautalya's reference to 'VARTĀ' in the Artha Shastra Book I chapter IV includes Agriculture, Cattle-breeding and trade in its scope. Kautalya has laid great emphasis on the study and practical application of 'VARTĀ' for national re-construction². According to several scholars, the whole field of human knowledge in ancient India seems to have been divided among four categories viz. 'Anvikshiki' relating to philosophy and reasoning, 'Trayi' to the Vedas and theology, 'Danda Nīti' to polity and 'Varta' to wealth both public and private. 'Varta' was the branch of learning in ancient India devoted to the systematic study of the material interests of the people, their economic welfare, its preservation and development. The application of the principles of 'Varta' within the state by competent men was the lookout of the sovereign. The sovereign had to learn 'Varta' with special attention to its more useful sub-division viz. agriculture, cattle rearing and trade from teachers having special knowledge thereof³. Kautalya includes 'Varta' in the course of study prescribed for the prince, the subject being taught by Supdt. of Government Department having not merely a theoretical but also practical knowledge of the same.

The manner of treatment of 'Varta' in some of the Sanskrit texts is rather concrete. Though we do not come across any work entitled 'Varta Shastra' dealing with the entire subject of National Economy, yet the different references in the Vedic literature, Smritis, Epics and Kautalya's Artha Shastra throw light on different aspects of National Economy and economics concepts prevailing at that time. The economic treatises of the ancients in India could not be like those of the present day thinkers, because in the past thinkers and writers took a co-ordinat-

(१) कश्चित्ते दयिताः सर्वे कृषि गोरक्ष्य जीविनः
वार्तायां संभितस्तात लोकोहि सुख मेधते

अयोध्याकाण्ड अ० १००।४७

कश्चित् स्वन्ठिता तात वार्ता ते साधुभिर्जनैः
वार्तायां संभितस्तात लोकोऽयं सुखमेधते

महाभारत सभाषव ॥ ८० ॥

(२) कृषि पाशुपाल्ये वाणिज्या च वार्ता ॥ १ ॥
आम्यपशुहिरण्य कुप्यविष्टि प्रदाना दीपकारिकी ॥ २ ॥
तया स्वपक्षे परपक्षे च वशीकरोति कोशदण्डाभ्याम् ॥ ३ ॥

(की० १।४)

(३) त्रिविधेभ्यस्त्रयीं विद्यां वण्डनीति च शाश्वतीम् ।
आम्बोजिह्वी आत्मविद्या वार्तारम्भाश्च लोकतः ।

(मनु ७।४३)

ed view of the entire life of the people—political, social, economic and cultural. The problems of life were considered in their entirety and not in parts. In modern times there is a greater specialisation in each branch of knowledge, as a result of which there is greater regimentation of thought. Our ancient thought is based on a synthesis of the whole human life and its different aspects are co-related presenting one unified picture of the entire system. It would be interesting here to note that the ancient Indian economic thought was ahead of the ancient western economic thought. This would be evident from the study of the works of physiocrats—Smith and Richardo who have all emphasised on particular aspects of economic life. Our thinkers took a wider view of the social life of the people and considered economic behaviour as a part and parcel of the general life of the people. We could never think of a narrow limited economic man as conceived by Adam Smith. On the other hand our concept was of a perfect social man—the Virat Purusha who was considered as an ideal social, economic and political man. He was not a man who was dominated by a narrow feeling of self interest but was a man who was always guided by social welfare.

In the Western philosophy, there is hardly any direct relationship which might have been generally accepted between religion and politics. On the otherhand in India, religion has always been considered as the pivot of all human existence. It not only determined our social and spiritual life but also our economic and political behaviour. Throughout our ancient literature we find that the four objectives of an individual's life known as the four Purusharthas—'Dharama', 'Artha', 'Kama' and 'Moksha'—go together. In the true spirit of our religion and philosophy of life, that action alone is to be recognised as 'Dharma' which leads to the desired happiness in the world and also to the highest bliss of emancipation¹. The action which is opposed to it is Adharma. The intimate contact of religion with human life explains why ancient Hindu social, Political and economic theories were often dealt with in the same books in which law and domestic rituals were discussed. Artha Shastra as interpreted in ancient times implied both Economics and Politics. In other words it meant Political Economy. Besides, Kautilya's Artha Shastra is not merely the science of wealth but also a part and parcel of the science of life. Economics was given a religious

(१) यतोऽभ्युदय निः श्रेयस सिद्धिः स धर्मः ।

(वैशेषिक)

bias for the sake of achieving justice and fair play in economic behaviour. In spite of the overwhelming influence of religion in all walks of life, India has not lagged behind in making contribution to the world at large in the field of Politics, Economics and Sociology. In fact the Indian Political and economic organisation was once recognised as an ideal system which others tried to copy. Indian thought and Culture never represented a complete negation of life nor of complete life affirmation but a synthesis of both.

Ancient Economic Thought in the West, enshrined in songs and mythological lores, is very rudimentary. Economic concepts have to be gleaned from the works of ancient poets and Philosophers. If in the West "The Republic" and "The Laws" of Plato and "Dialogues" of Aristotle are the sources of such gleanings, we in India have more exhaustive sources to look upon. In fact they may be regarded as the original sources of thought not only for Indian Philosophers but also for the master thinkers of the world at large. Ancient India has bequeathed to us a vast treasure of texts which represent the intellectual and literary activities of several thousands of years ago. No other nation has a greater treasure of ancient literature than what we in India have. This literature deals with Philosophy, Religion, Ethics, Geography, Astronomy, Politics and the like. It is impossible to form a correct appreciation of Culture and Civilisation of any nation without some reference to its literature. Literature of a country is the mirror of its social, political and economic conditions prevailing at a certain time. Our ancient literature has been broadly divided into two main branches—sacred and secular. The sacred literature deals with religion and matters spiritual while secular literature deals with miscellaneous matters of the world.

The Vedas

In the ancient literature of India, the Vedas rank first in matters of antiquity. They are four in number—Rig, Yaju, Sama and Atharva. An agreed view of Vedic scholars is that 'Gyan Kand' is the sphere of Rig Veda, 'Karma Kand' that of Yajurveda, 'Upasana Kand' that of Sam Veda and Atharva Veda deals with 'Vigyan' and miscellaneous topics. Some of the Western scholars believe that Rig Veda is the oldest among the Vedas followed by Yaju and Sama—the last being the Atharva Veda. Maharshi Daya Nand, a great Vedic scholar, believed that the four Vedas were revealed to the divine consciousness of the four Rishis—'Agni', 'Vayu', 'Aditya', and 'Angira' at the time of the creation of the Universe. That is why they are

called Shruti i.e. something heard and felt by those who were of the purest head and heart to receive this divine wisdom. Though Theology is considered the most important science in the Vedas, all other physical, social and human sciences have their roots in them. The following lines from Yogi Arvind confirm the views held by Rishi Daya Nand:—

“There is nothing fantastic in Daya Nand’s ideas that the Vedas contain truth of science as well as truth of religion. I will even add my own conviction that the Vedas contain other truth of a science which the modern world does not at all possess and in that case Daya Nand has rather understated than overstated the depth and range of the Vedic wisdom”. Manu’s references to the Vedas as quoted below stand in support of what has been pointed out above in regard to the Vedas¹.

The earliest literary work—the Samhita of the Rig Veda is regarded even by the Western scholars as more than 3000 years old. The Rig Veda is full of prayers for long life, freedom from disease, wealth, power, abundance of food and drink and defeat of rivals. Pt. Nehru in his ‘Discovery of India’ writes, “The Rig Veda, the first of the Vedas, is probably the earliest book that humanity possesses. In it we find the first outpourings of the human mind, glow of poetry, the rapture at Nature’s loveliness and mystery. Many Hindus look upon the Vedas as revealed scripture. This seems to me to be peculiarly unfortunate for thus we miss their real significance—the unfolding of the human mind in the earliest stages of thought. And what a wonderful mind it was! The Vedas (from the root Veda to know) were simply meant to be a collection of the existing knowledge of the day; they are a jumble of many things—hymns, prayers, ritual for sacrifice, magic, magnificent

(१) वेदोऽखिलो धर्ममूलं स्मृतिशीले च तद्विद्वान् ।

आचारद्वयं साधनामार्गमस्तुष्टिरेव च ॥

(मनु २।६)

अर्थकामेष्टवस्तुनां धर्मज्ञानं विधीयते ।

धर्मं जिज्ञासमानाणां प्रमाणं परमं भूतिः ॥

(मनु २।१३)

चातुर्वर्ण्यं त्रयो लोकाश्चत्वारश्चाधमाः पृथक् ।

भूतं भव्यं भविष्यं च सर्वं वेदात्प्रसिध्यति ॥

(मनु १२।१७)

शब्दः स्पर्शश्च रूपं च रसो गन्धश्च पञ्चमः ।

वेदादेव प्रसूयन्ते प्रसूतिगुणकर्मतः ।

सेनापत्यं च राज्यं च दण्डनतृप्तमेव च ।

सर्वलोकाधिपत्यं च वेदशास्त्रविद्वर्ति ॥

(मनु १८-१००)

nature poetry. There is no idolatry in them, no temples for the Gods. The Vitality and affirmation of life pervading them are extraordinary." Allied with the Vedas are the four Brahman-Granthas — Aitraya, Taitraya, Shatpath and Gopath which are commentaries on the Vedas followed by Aryankas and Upanishads originally called Vedanta. The Upanishads are several in number but the most important are Isha, Kena, Katha, Brihदारanyaka, Chhandogya, Prashna, Mundak, Mandukaya, Aitraya Taitraya and Shweatashwatara. The high philosophy of the Upanishads created a powerful impression on European philosophers and thinkers. There is in the Upanishads a considerable emphasis on the fitness of the body and charity of the mind, on the discipline of both body and mind. The Bhagwat Gita is the essence of the philosophy of the Upanishads and is probably the best known, most widely read and most popular book in Sanskrit literature. It has been translated into a number of foreign languages.

The Smritis

As distinguished from Shruti — the Vedas, are the Smritis which are many in number, but the most important of them are the smritis of Manu, Yagnavalkya, Narada, Parashar, Bharadwaj, Harit, Vishnu and some others. Among all the Smritis the commanding position is that of Manu-Smriti. It is not possible to discuss the period of writing of different Smritis as substantial additions to all this literature have been made from age to age. Manu Swyambhava is the lord of the first Manu cycle. Manu Vaivasvata is the seventh in descent from Manu Swyambhava and is said to be the originator of human race after the great flood. He framed rules and laws of government and laws for the general order of society. It is this Manu Vaivasvata with whose name *Manusmriti* or *Manav Dharma Shashtra* (The famous code of Manu) is associated. Manu appears many times in the Mahabharat and according to ancient Hindu tradition, as already pointed out, was the first king of the mortals. Fragments of the code bearing his name must have been composed long ago, but the time when the fragments were consolidated in a compact form cannot be accurately determined. The codes of *Manu* and *Yagnavalkya* occupy a unique position in the legal history of the land. Their authority is regarded as supreme by the unanimous verdict of both the lay and legal literatures of Hindu India. They are the bases of our present Hindu Law. According to K. P. Jayaswal, Manu's code is the mirror reflecting the national sentiment of the times.

In a nutshell the laws of Manu deal with four Pursharthas—(Dharma, Artha, Kama and Moksha), three Rinas — debts or duties (Deva, Rishi and Pitri), Sixteen sanskaras, five types of sacrifices, four Varnas and Ashramas and duties of the king or the Raj Dharma. These very laws find a reinterpretation or amplification in other smritis or Dharma sutras or shastras according to the needs of the times.

The famous German philosopher Nitzsche wrote about the code of Manu, "The law book of Manu is an incomparably greater intellectual book than the Bible." All the important Smritis are metrical texts containing the rules and regulations for guidance of the society. They are based on the Dharma sutras and Grihya Sutras of the Vedic literature, but additions and alterations have been freely made to make them suitable to the changed conditions of society. Manusmriti, the most well known work of the kind, still holds the field in the legal world and the Government of India had sometimes back decided to erect a statue of Manu in front of the office of the Supreme Court at New Delhi.

The Epics

The two great Epics of ancient India—the Ramayan and the Mahabharat were originally composed by sage poets Valmiki and Vyas. After several additions they have taken the present shape in the course of several hundreds of years. Valmiki is the earliest poet known to classical sanskrit literature and his first great poem — the Ramayan, which besides giving details of political, social, economic and religious life of a particular epoch, can inspire the youths of the country to higher and nobler ideals of conduct and character. The Ramayan is the first national epic of India somewhat comparable to but older than Illiad. It will have the first critically prepared edition undertaken by the Oriental Institute, Baroda. Scholars now-a-days recognise in the Ramayan either a poetical version of certain old Vedic myths, or a glorified account of the conquest of South India by Aryans. Even Western studies and translations of the Ramayan have proved that the Epic with its moving story of conjugal love, paternal devotion, truthfulness and willingness to sacrifice one's interests to secure the welfare of others has an universal appeal strong enough to establish a bond of affinity and brotherhood between India and other countries.

The great Epic of Mahabharat by Krishna Dwaipayana Vyas is comparable only to the Ramayan in its hold over the millions

of Hindus. This great Epic is full of history, tradition and mythology. While the Ramayan is cherished as the first among the Kavyas, the *Mahabharat* is revered as the fifth Veda¹ and regarded as the cultural encyclopaedia of the Hindus. The Epic occupies an unique place in the world's literature. According to Dr. Radha Krishnan, "If there is any work which expounds ancient Hindu Dharma from various angles of vision and in all its multifarious aspects, it is in that Epic of the Pandava Princes and their divine friend Sri Krishna. Though the Mahabharat describes a society distracted by deceit and intrigue yet nothing less than Truth and Right, Satya and Dharma form the theme of the great epic. It proves beyond doubt that victory waits on righteousness². It is said that the Epic is holy Arthashastra, holy Dharmashastra, holy Mokshashastra spoken of by the great intellect of sage Vyas. Nothing better regarding Dharma, Artha, Kama and Moksha can be found discussed elsewhere. In this respect what is not dealt within this great Epic cannot be found anywhere else³". It is interesting to note here what Sir Edwin Arnold wrote about the importance of these great epics :—

"These most remarkable poems contain almost all the history of ancient India so far as it can be recovered together with such inexhaustable details of its political, social and religious life that the unique Hindu world really stands epitomised in them. The stories, songs and ballads, the histories and genealogies, the nursery tales and religious discourses, the art the learning, the philosophy, the creeds, the moralities, the modes

(१) ब्रह्मन् वेदरहस्यं च यच्चागम्यत् स्थापितं मया ।

साङ्गोपनिषदां चैव वेदानां विस्तरक्रिया ॥

(म० भा० आ० पर्व ६२)

(२) यतो धर्मस्ततो जयः

(३) अर्धशास्त्रमिदं पुण्यं धर्मशास्त्रमिदं महत् ।

कामशास्त्रमिदं प्रोक्तं व्यासे नामितं बुद्धिना ॥

(म० भा० आ० पर्व ३८३)

यथा समुद्रो भगवान्यथा हिमवान् गिरिः ।

ह्ययातावुभौ रत्ननिधी तथा भारतमुच्यते ॥

(म० भा० आ० पर्व ५६।२७ श्री सुकथंकर)

धर्मं चार्थं च कामे च मोक्षे च भरतवर्षे

यदिहास्ति तदग्न्यत्र यन्नेहास्ति न कुत्रचित् ॥

(म० भा० स्वर्गरोहण पर्व)

of thought, the very phrases, sayings, terms of expression and duty ideas of the Hindu people are taken from the poems”.

When Shelly remarked that ‘*Poets are the unacknowledged legislators of the world*’ he meant that their works stir the imagination, move the mind, mould the will, in a word change our life. Great poets are life givers and life changers in every country. The people of India had been stirred by the great poet Tagore in national achievements during recent history. The central theme of the Mahabharat, a famous historical war between the Kauravas and the Pandavas and their allies which ended with the destruction of the former in the great battlefield of Kurukshetra, has a lesson for a student of Indian History quite irrespective of allegory it might contain. The Epics present the noblest efforts of creative poetic genius on Indian soil. For centuries they have been believed as wholly true by the masses of Indian people. They have supplied ideals to successive generations of people in India. For centuries Indians have turned in sorrow, in joy and in daily toil to these noble poems for solace and inspiration. In this sense they have become national possessions keeping alive through ages of disunion, strife and misery the idea of a common origin and of common traditions. A critical edition of the Mahabharat has been published by the Bhandarkar Oriental Research Institute, Poona under the chief editorship of Dr. S. N. Belvalkar.

The Arthashastra

Kautalya’s Arthashastra is a sort of objective literature. In the realm of literature on politics and economics it is similar to that of Panini’s Ashtadhyai in the field of Grammar. A complete Economist should be a Mathematician, a philosopher, a Psychologist, an Anthropologist, a Historian, a Geographer, a student of politics, a master of prose exposition and a man of the world with experience of practical business and finance. He should have an understanding of the problems of administration, a good knowledge of four or five foreign languages and familiarity with economic literature. This is as good as saying that there has never been and there is never likely to be a complete economist or a complete economic planner, but in case of Kautalya we find all these qualities combined in one personality. For him political economy was a continuous and dynamic process. Like Panini Kautalya superseded all his predecessors because the treatment of the subject in the past was not as comprehensive or systematic as that in his *Arthashastra*.

Kautalya's *Arthashastra* deals with a vast variety of subjects. The work is remarkable for its elaborate and detailed considerations of the diverse aspects of Statecraft. It is divided into 15 large Sections and 180 sub-divisions and covers almost every aspect of the theory and practice of political Economy. After indicating the general lines along which a prince should be trained for the onerous responsibilities of Government, the work describes at great length the duties of the king, his ministers and counsellors, departmental Heads of Government and Superintendents of Trade and Commerce. Kautalya also deals with the Government of towns and villages, law and law courts, special customs, rights of women, maintenance of old and helpless, marriage and divorce, taxation, maintenance of army and navy, techniques of war and peace, diplomacy, agriculture, spinning and weaving and host of other subjects. Military organisation and strategy occupy a prominent position and the collection and disbursement of revenue from all possible sources are treated with a keen eye to details.

The Author of the *Arthashastra* has advocated the cause of a secular state. Writing about 2500 years ago, he has spoken of non-aggression pacts and collective defence which are occupying so great an importance in the modern world. He has propounded the rudiments of the modern Welfare State. The date of the *Arthashastra* has been very controversial and well-known scholars have expressed different views. Many reputed authors believe that the striking resemblance of several technical terms between Panini and Kautalya indicate that Panini preceded Kautalya.

It was nearly fifty years ago that Pandit R. Shama Sastry burst upon our English speaking world with his translation of the famous *Arthashastra* of Kautalya. It is to Pandit Shama Sastry's credit that the text was made available to the public for the first time. After some years Mr. T. Ganapati Sastri brought out an edition of his own using manuscripts from different sources. Dr. Jolly brought out an edition from Lahore and Prof. Keith also contributed his share in some of the controversies involved in the variety of texts and in discussions about the author. Whatever it is, there is no doubt that Vishnugupta or Kautalya was an astute political philosopher of the 4th century B.C. It is on account of his thoroughness that his book seems to have been the last word for centuries on the science of Political Economy and later scholars found it difficult to supersede the great master.

At the very outset of his book Kautalya has referred to the School of Manu, the School of Brihaspati and the School of Usna in Chapter II book I. He points out in chapter I that this Arthashastra is made as compendium of almost all the views on economics prevailing at that time.

In his treatment of knowledge he holds that four and only four are the sciences from which all that concerns righteousness and wealth is drawn. Kautalya recognises the supremacy of the Vedas for righteous acts and of *Varta* for wealth¹.

The Arthashastra also lays stress on the old doctrine that 'Never shall an Arya be subjected to salvery'. In the end of the work the author points out,

"Thus this Shastra, conforming to these paragraphic divisions is composed as a guide to acquire and secure this and the other world.

"In the light of this Shastra one can not only set on righteous, economical and aesthetical acts and maintain them, but also put down unrighteous, uneconomical and displeasing acts²."

- (१) पृथिव्या लाभे पालने च यावन्त्यर्थशास्त्राणि पूर्वाचार्यैः प्रस्तावितानि प्रायशस्तानि संहृत्यकमिदमर्थशास्त्रं कृतम् ॥१॥ (को० अधि० १।१)
 आन्वीक्षिकी त्रयो वार्ता दण्डनीतिश्चेति विद्याः ॥१॥
 त्रयो वार्ता दण्डनीतिश्चेति मानवाः ॥२॥ त्रयोविशेषो ह्यान्वीक्षिकीति ॥३॥
 वार्ता दण्डनीतिश्चेति बार्हस्पत्या ॥४॥ संवरणमात्रं हि त्रयोलोकयात्राविह इति ॥५॥
 दण्डनीतिरेका विद्येत्योशनसाः ॥६॥ (को० अधि० १।२)

अर्थाधर्मोऽथयामर्थनिर्णो वार्तायां नयापनयो दण्डनीत्याम् ॥१॥

(को० अधि० १।२)

- (२) एवं शास्त्रमिदं युक्तमेताभिस्तन्त्रयुक्तिभिः ।
 अवाप्ती पालनं चोक्तं लोकस्यास्य परस्य च ।
 धर्ममर्थं च कामं च प्रवर्तयति पाति च ।
 अधर्मनिर्णं विद्वेषानिदं शास्त्रं निहन्ति च ॥

(को० अधि० १।५।१)

CHAPTER II

STRUCTURE OF SOCIETY AND SOCIAL STANDARDS

ब्राह्मणोऽस्य मुखमासीद् बाहू राजन्यः कृतः ।
 ऊरू तवस्य यद्वैश्यः पद्विष्णोः शूद्रो अजायत ॥ (यजु० ३१)
 स्वस्ति पन्था मनुचरेम सूर्यचिन्त्रमसाविष ।
 पुनर्वदताऽऽनता जानता संगमेमहि ॥ (ऋ० ५।५।१।५)
 सर्वे भवन्तु सुखिनः सर्वे सन्तु निरामयाः ।
 सर्वे भद्राणि पश्यन्तु मा कश्चिद् दुःखभाग्भवेत् ॥ (सुभाषित)

The Varna-Ashram Principle

The social, cultural and political environments of a certain age determine the structure of society. There were two important factors which constituted the social structure in ancient India. One was 'Varna-Vyavastha' which was according to classes of people and the other 'Ashram-Vyavastha' was according to age groups in the society. They were both based upon Vedic scriptures and were advocated as the most efficient and scientific by learned scholars of the time both inside and outside the country. The whole Indian society was divided into four classes. The Learned class, Warriors, Traders and Artisans and finally manual labourers. It appears that the ancient Indian classification of society into four categories—Intellectuals or Brahmins, Militarists or Kshatriyas, Merchants or Vaishyas and Labourers or Shudras was not merely a description of local conditions in Aryavarta but a general recognition of the four grades of culture in the progress of civilisation. Plato in his 'Republic' refers to a division similar to the four principal categories of the Aryans of India. The 'Varna-Vyavastha' or Social Structure of ancient India did not imply the prevailing caste system among modern Hindus. The Hindu caste system, as developed later, has always been condemned not only by foreigners but also social reformers of all ages in India herself.

In the ancient Indian social organisation every individual had the freedom to choose his occupation in the society accord-

ing to his worth and natural aptitude without being hampered by arbitrary restrictions of birth, creed or colour. Through the 'Varna-Vyavastha' we in India created adjustment and collaboration in the midst of diversity. There are considerable differences between man and man and we need each other's help to make good our deficiencies. This leads to classification and a rational classification leads to progress and development of a race. A classification based on birth alone is anti-Vedic. It should be based on natural tendencies, acquired qualifications and actual deeds. The Bhagwat Gita supports that view in toto¹. To-day caste has been usually determined by birth. The conception of impurity communicable to a higher caste by contact with a lower one has resulted in the untouchability of the so-called Shudras. We find that these days in addition to the four original Varnas or class groups, there are many caste divisions, sub-divisions and their number has been constantly growing. The evils that the caste system has engendered cannot be fully estimated. Its effect upon the arts and crafts of India has by no means been exaggerated in the following eloquent denunciation by the late Mr. R. C. Dutt:—

“The results were disastrous, so far as arts were concerned. Genius was impossible except among priests and kings. Men held in perpetual moral bondage and servitude never learnt to aspire after greatness and glory. Men in whom honour was impossible never learnt to deserve honour and distinction. In other countries a cultivator might leave his plough and wield the destinies of the nation, or a Robert Burns might give expression to a nation's sentiments in thoughts that breathe and words that burn, but in India the cultivator's fate was sealed; he could never break through the adamant will of social rules. Among other people, a sculptor, a painter under healthier influences, the humblest artisan or engineer might rise to be a Watt or Stevenson but in India, the artisan and the engineer were chained by shackles of steel which it was impossible for them to break”

Whether we accept the Varna-Principle as a religious sanction ordained by the Vedas or we accept it as a mere historical necessity felt at the time of the advent of the Aryans in the country,

(१) चातुर्वर्ण्यं मया सृष्टं गुणकर्मविभागशः । (अ० नी० ४।१३)
 ब्राह्मणक्षत्रियविज्ञां शूद्राणां च परम्परा ।
 कर्मणि प्रविभक्तानि स्वभावप्रभवर्गुणैः ॥ (अ० नी० १८।४१)

the fact remains that it was definitely a code of communal life of the people for centuries. The spirit behind 'Varna-Dharam' was the spirit of division of labour in accordance with the temperamental aptitudes of different individuals which were grouped into four Vocational classes. Such Vocational classification, aiming at division of labour, is supported by Manusmriti and Bhagwat Gita¹. The social division of labour in ancient India arose, it appears, from the exchange between spheres of production and different individuals took up their own calling best suited to their tastes and temperaments whereby they could maximise the whole National Production. Now it may not be possible to go back to the 'Varna-Principle' of old. Anyhow the canker of casteism eating into the Vitals of our society has to be curbed in the best interests of the Nation.

Another characteristic feature of ancient Aryan Society was the division of individual human life into four age groups—the first was meant for education, the second was for family life, the third for forest life and the fourth was for a life of renunciation. They were otherwise known, as 'Brahmacharya', 'Grahastha', 'Vana-Prastha' and 'Sanyas', ashram' as discussed by Manu². The term 'Ashram' is derived from the root

- (१) सर्वस्यास्य तु सर्वस्य गुप्तयर्थं स महाद्युतिः ।
 मुख-बाहूकपञ्जानां पृथक् कर्माण्यकरूपयत् ॥
 अथयापनमध्ययनं यजनं याजनं तथा ।
 दानं प्रतिग्रहं चैव ब्राह्मणानामकरूपयत् ॥
 प्रजानां रक्षणं दानमिज्याध्ययनमेव च ।
 विषयेष्वप्रसवितृष्व क्षत्रियस्य समासतः ॥
 पशूनां रक्षणं दानमिज्याध्ययनमेव च ।
 वर्णिकपथं कुसोर्व च वैश्यस्य कृषिमेव च ।
 एकमेव तु शूद्रस्य प्रभुः कर्म समादिशत् ॥
 एतेषामेव वर्णानां शुभ्रवामन सूरया ॥ —मनु० १।८७-९१
- शमोदमस्तपः शौचं क्षान्तिराजं च मेव च ।
 ज्ञानं विज्ञानमास्तिक्यं ब्रह्मकर्म स्वभावजम् ॥ (भ० गी० १।८४२)
- शौर्यं तेजो धृतिर्दाक्ष्यं युद्धे चाप्यपलायनम् ।
 दानमोदवरभाषडच क्षात्रं कर्म स्वभावजम् ॥ (भ० गी० १।८४३)
- कृषिगोरक्षवाणिज्यं वैश्यकर्म स्वभावजम् ।
 परिचर्यात्मकं कर्म शूद्रस्यापि स्वभावजम् ॥ (भ० गी० १।८४४)
- स्वे स्वे कर्मण्यभिरतः संसिद्धिं लभते नरः ।
 स्वकर्मनिरतः सिद्धिं यथा विश्वसि तच्छृणु ॥ (भ० गी० १।८४५)
- (२) ब्रह्मचारी गृहस्थश्च ज्ञानप्रस्थो यतिस्तथा ।
 एते गृहस्थप्रभवाश्चत्वारः पृथगाश्रमाः ॥
 सर्वेऽपि कर्मशस्त्रेते यथाशास्त्रं निर्वेचिताः ।
 यथोक्तं कारिणं विप्रं नयन्ति परमां गतिम् ॥ (मनु० ६।८७-८८)

'shram' i. e. to exert oneself and signifies a stage in the long journey of life. It also implies both—the place where one exerts oneself and the mode of exertion. According to the Vedic System, the functional classification of society and the periodical division of human life was in tune with the orderliness of Nature. As seed is sown, grows, ripens, is harvested and ground into flour for the making of bread, so was a like succession in human life as ordered by the Rishis in ancient India. The arrangement of the 'Ashrams' was intended to secure the steady evolution of human beings to become the most useful citizens of the state in all walks of life. It is evident, therefore, that the ancient Indian mind was extraordinarily analytical for putting social and individual activities into suitable and fruitful compartments. Ashram Dharma, the code of individual life, set individual's life systematically, dealt with the human duties to which human rights were subservient in the ideal order. The 'Varna-Ashram Vyastha' implied the fundamental principles of planned education, planned family life, planned economy, planned defence and planned recreation. In summarising the importance of this scientific social organisation, we must agree with the late Prof. K.T. Shah when he says :—

"The Varna-Ashram Dharma of ancient Indian Polity and Economics is a long range or permanent plan embracing every class in the entire society. It applied to every individual in his several conditions of age, work or situation. No one could be workless. None could have work inappropriate to his ability, training, aptitude or attainment nor could any work be inadequately remunerated. The young and the aged could be cared for, provided with such work as they may be able to do or even without any direct material contribution to the wealth of the community.

The specific authority of the *Arthashastra* and other analogous Treatises shows that the scheme of life practised in India in ancient times and surviving till quite recent times showed an example of comprehensive, co-ordinated planning which has got to be correspondingly conceived or similarly attained in any part of the world"¹

Our modern national government has adopted plans for the establishment of a socialistic pattern of society in the country. The Socialistic Pattern of Society has not been clearly defined

so far, but it may be a pattern which is casteless and classless. Let there be no Vacuum after the abolition of casteism. Neither differentiation according to caste nor differentiation according to wealth can take us very far. For a progressive society, what is needed most is functional classification as envisaged in our ancient social structure. Moreover there is a need for maintaining certain standards in each walk of life on which Vedic literature throws ample light. If we march ahead on the path of 'Varna-Ashram', we can create an ideal socialistic pattern of society which may be a torch bearer for other countries of the world.

The Joint Family System

Another basic foundation of social life in ancient India was the Joint Family System. It was the patriarchal family and a kind of absolute control by parents over children appears to have been the rule. The family was characterised by sweet and affectionate relations between its members which formed a distinctive feature of ancient Hindu Society so fascinatingly described in immutable works like the Ramayan and the Mahabharat¹. The famous Kathopnishad story of Nachiketa, son of Rishi Uddalak, who obediently carried out the mandate of his father brings to light the discipline imposed by the family chief. Joint Family was the pivot of the entire social structure in ancient India. It was a part and parcel of the Socio-Economic system and embraced the whole life of an individual. It developed in the members of the family a spirit of discipline, sacrifice, obedience, reverence and discouraged selfishness. Nobody fell a victim to want, disease or idleness. It provided a type of Social Insurance to all members of the family. Orphans, aged, infirm and the unfortunate widows were all looked after and provided with the necessities of life. The individualism brought on by the

-
- (१) अनुव्रतः पितुः पुत्रो मात्रा भवतु संमनाः ।
 जाया पर्ये मधुमती वाचं वदतु शक्तिवाम् ॥
 मा भ्राता भ्रातरं द्विजन्मा स्वसारमत स्वसा ।
 सम्यञ्चः सन्नता भूषा वाचं वदत भद्रया ॥ (अथर्व० ३।३०)
 वृषसनी वा समृद्धो वा गतिरेव तवानघ ।
 एष लोके सतां धर्मो यज्येष्ठवशगो भवेत् ॥
 रामं दशरथं विद्धि मां विद्धि जनकात्मजाम् ।
 अयोध्यामटवीं विद्धि गच्छ तात ययासुखम् ॥ (रा० अ०)
 भीमार्जुनाबुभौ नेत्रे मनो मय्ये जनार्दनम् ।
 मनस्यर्थाविहीनस्य कीदृशं कीदृशं भवेत् ॥
 (म० सभाषर्वाणि-राजसूयारम्भयथं)

British disrupted the sweet Joint Family Life in India. That is why Mahatma Gandhi envisaged the strengthening of Joint Families and gave a call to the people to set up Cottage Industries preferably on co-operative basis. He was very anxious to join together the broken threads of love and sweetness not only by means of reorganising joint families but also by means of industrial co-operatives which could give an opportunity to the Joint Families to lead an honourable and contented life. Contented and harmonious families are the bulwark of a strong state and for maintenance of peace in the international sphere the whole world has to be treated as one big family. In this respect our ancient concept of regarding the whole world as one family can suggest a way out to improve the Socio-Economic relations of the people of the world at large¹.

The Institution of Marriage

The Aryans have given a very clear analysis of human feelings and desires. The natural attraction between man and woman was named as 'Kama' by the great physiologist Sharangdhar². It was because of this instinct of 'Kama' in man and woman that the institution of marriage was evolved to sanction and sanctify the union of the two. The Indian seers had a Vision of the law of Brahmacharya which was unique. They, therefore, upheld sacramental marriages. Rituals make individuals physically, emotionally, intellectually and spiritually one in a complete fusion of the relationship. The idea of husband and wife becoming one not only legally but also spiritually has gone deep into the fibre of Indian culture. Manu speaks of eight forms of marriages and Kautalya recognises the same in his *Arthashastra*³. The institution of marriage was exalted in the Indian tradition. Women were free to choose their husbands. The freedom of women seems to be evident from the account of the popular festival called 'Swyamvar'. Sita, Damayanti and Draupadi were married in a 'Swyamvara' though

(१) वसुधैव कुटुम्बकम् ।

(२) कामस्तदग्रे समवर्तताधि मनसो रेतः प्रथमं यदासीत् । (अथर्व० १९।५२।१)

स्त्रीषु जातो मनुष्याणां स्त्रीणां च पुरुषेषु वा ।

परस्परं कृतः स्नेहः काम इत्यभिधीयते ॥

(शाङ्ग्वर १।६)

(३) चतुर्णामपि वर्णानां प्रेत्य चेह हितहितान् ।

अष्टाविमान् समासेन स्त्रीविवाहास्त्रिबोधतः ॥

ब्राह्मो वैवस्वर्बार्वाः प्राजापत्यस्तथासुरः ।

गान्धर्वो राक्षसश्चैवं पञ्चाचष्टाष्टमोऽथमः ॥

(मनु० ३।२०-२१)

it is doubtful whether the common man of the country believed in the practice. Child marriage, a feature of later times, seems to have been unknown in ancient India as directed by Rig Veda¹. Manu refers to the ideal of happiness of husband and wife which brings about welfare of the family². The family life was not disjointed and the practice of divorce was an exception, but Kautilya, the great realist, seems to have provided for divorce also. The society depicted by Kautilya permits re-marriages of widows and divorces, if the husband either is of bad character or has gone abroad for a long time or has become a traitor to his King or has lost Virility³.

Position of Women

Position of women in society rested upon the sacred ties of marriage and the Aryans knew of no more tender relation than that between husband and wife. The wife, though subject to her husband, was the mistress of the house-hold, had authority over farm labourers and other members of the household. Her importance is sufficiently indicated by the fact that she participated with her husband in all religious ceremonies. King Rama could not perform a 'Yagya' in the absence of Sita and Draupadi administered many things concerning the household at the time of Rajsuya Yagya performed by King Yudhishtra. It appears that there was no Purdah system and women participated in the conversation with men in the society. Women decorated themselves gaily with ornaments; they were properly educated and some of them did rise to the rank of Rishis and held philosophical discourses. Manu lays down rules for the general respect of women in the household and in the society⁴. Appealing to women to tear down purdah, Gandhiji had cited Draupadi's name as an outstanding character shorn of fear and false modesty. He wrote "Draupadi was a giant oak who bent mighty Bhima

- (१) युवा सुवीताः परिवीत आगात्स उ ध्येयान्भवति जायमानः ।
तं वीरासः कवय उन्नयन्ति स्वाण्यो मनसा देवयन्तः ॥ (ऋ० ३।८।४)
- (२) सन्तुष्टो भार्यया भर्ता भर्ता भार्या तर्पय च ।
यस्मिन्नेव कुले नित्यं कल्याणं तत्र वं ध्रुवम् ॥ (मनु० ३।६०)
- (३) नीचत्वं परदेशं वा प्रस्थितो राजकिल्बिषो ।
प्राणाभिहन्ता पतितस्त्रयज्यः क्लीबोऽपि वा पतिः ॥ (को० ३।२)
- (४) पितृभिर्भर्तृभिश्चिताः पतिभिर्देवरैस्तथा ।
पूज्या भूयितव्याश्च बहुकल्याणमीप्सुभिः ॥
यत्र नार्यस्तु पूज्यन्ते रमन्ते तत्र देवताः ।
यत्र तास्तु न पूज्यन्ते सर्वास्तत्राकलाः क्रियाः ॥ (मनु० ३।५५-५६)

to her imperious will and she stood in no need of protection from anyone of the Pandavas.”

Both Manu and Kautalya have provided for Stri Dhana¹ which throws light on the economic aspect of the rights of women. History proves that all countries which have respected their women have risen to great heights. It was true of ancient India. The wise Vidura, in the Prajagar Parva of the Mahabharat, impressed on the society the desirability of respecting women so that they might play an important role in domestic and social life². The ideas of men of genius do not wither with age and their force is strong enough to infuse the minds of great men in a country. Dr. Karve, a centenarian now, took up the cause of education of women many years ago. This cause was certainly more important than any other in the sphere of nation building, because it is from the laps and lips of educated women that a sound new generation is born and begins to learn. Chivalrous exhortations from brave women have resulted in Victory and glory for warriors in the battlefield. Many of our social movements could not succeed because of the backward condition of our women. Marshall Bulganin appealing to a batch of American women spoke that they by their organisation and moral force could stop the atomic warfare. India, after freedom, is passing through a period of rapid transition. We find a change going on in our entire social life including position and status of women. Our values are rapidly changing and new norms and standards are being adopted by us. This type of social change is bound to affect our economic development for the better.

System of Education

‘Upon the education of the people of a country the fate of the country depends’ was rightly spoken of by Disralie. Education should be regarded as one of the most important key industries for building up the Nation. Education is essential for enabling men and women to assert their social rights, to exercise them wisely and to work for their expansion. It is no

(१) अध्यग्न्यध्यावाह्निकं दत्तं च प्रीतिकर्मणि ।

भ्रातृमातृपितृप्रप्तं वद्विषं स्त्रीधनं स्मृतम् ॥

(मनु० ९।१९४)

दत्तिरावध्यं वा स्त्रीधनम् ॥

(कौ० ३।२)

(२) पूजनीया महाभागाः पुण्याश्च गृह्णीत्ययः ।

स्त्रियः धियो गृहस्थोक्तास्तस्माद् रक्ष्या विदोषतः ॥

(म० प्रजापरपर्व)

exaggeration to say that a human being without education is in no way better than an animal¹.

In ancient India, education was not imparted on commercial basis and was not considered as an investment. There were greater opportunities for receiving instruction and training. For instruction emphasis was placed mainly on independent study and discourse. For training, residence in the Gurukul under the fostering care of the teacher was necessary. Ofcourse, the best institution of education upto the age of eight was the child's own home—his father and mother². This shows a sharp contrast of our civilisation with that of the West where it is considered more dignified to leave small children to the care of Ayas and certain institutions. Under such conditions they imbibe sometimes culture not of their parents but of the Ayas.

Teacher and Taught

Children lived with the Acharya like members of his family and that is why the institution was called a Guru Kula i.e. the family of the Guru or the Teacher. In such institutions the Brahmacharis lived under the most rigorous discipline for a prescribed time. Educational system was based upon what is known as the ancient system of Brahmacharya which laid more emphasis on sacred life than on mere learning or instruction. There were four qualities which distinguished the life of a Brahmchari—Service, Study, Simplicity and Self-control. Ideals of learning played an important part in the moulding of an individual's character. Both the teacher and taught were inspired by the literary and cultural ideals of the age. The relationship between the teacher and pupil was not mercenary although the teacher was compensated for his labours through gifts. These payments were voluntarily made by the pupils partly in wealth and partly in the form of service. Students used to collect fire-sticks and to help in cooking for their master. They also tended the milch cattle kept by their Gurus. At the close of their student career, they gave 'Guru Dakshina' in the form of some dedication at the will of their Preceptor. There are instances when the teachers have demanded some kind of service to the society from their taught. The teacher was the

(१) विद्या ब्रह्मजनो विदेशगमने विद्या परं दंष्ट्रं ।

विद्या राजसु पूज्यते नहि धनं, विद्या बिहोतः पशुः ॥

(सुभाषित)

(२) नातुमान् पितृमानाचार्यवान् पुरुषो वेद ॥ (शतपथ ब्रा०)

friend, philosopher and guide of the pupil. The pupil invariably paid greatest respect to the teacher. The discipline was not one-sided. The teacher was not to be merely a teacher but had to present a model life for the taught. He lived, worked and gave lessons according to certain rigid rules and regulations. In fact he had to live the life of an ascetic—a missionary of truth and Justice¹.

Subjects of Study

The Upanishads contain several lists of subjects of study which give us a good idea of the wide range of knowledge in those days. One such list mentions not only Veda, Itihasa, Purana, but also Grammar, Mathematics, Chronology, Dialects, Physics, Astronomy, Military Science and Fine-arts.²

During the period of the Epics great emphasis was given to the proper training of the heir apparent. Special schools were organised for the education of princes. In the early stages the study of the Vedas and Philosophy loomed large even in the princely curriculum. In advanced studies Economics and Politics dominated. Practical education included training in administration and the military art and tactics. The Prince was made a good bowman, skilful horseman and an expert controller of elephants³. Both Nala and Nakula besides being equipped with princely training were experts in Veterinary

(१) विद्या विलासमनसो षूतशीलशिक्षाः, सत्यवता रहितमानमलापहाराः ।

संसारदुःखदलनेन सुभाषिता ये, धन्या नरा विहितकर्मपरोपकाराः ॥

(सत्यार्थप्रकाश तृ० स०)

(२) सहोवाचश्वेदं भगवोऽध्वेमि यजुर्वेदं सामवेदं आयुर्वेदं चतुर्थमितिहास पुराणं पञ्चमं वेदानां वेदं पित्र्यं राशिर्निधि वाकोवाच्य मेकायनं देवविद्यां ब्रह्मविद्यां भूतविद्यां-
अत्रविद्यां नक्षत्रविद्यां सर्वदेवजनविद्यां एतद्भगवोऽध्वेमि । (छान्दोग्य उपनिषद्)

(३) षूतराष्ट्रश्च पाण्डुश्च विदुरश्च महामतिः ।

जन्मप्रभृति भीष्मेण पुत्रवत् परिपालिताः ॥

संस्कारैः संस्कृतास्ते तु द्रताध्ययनसंयुताः ।

श्रमश्यायामकुशलाः समपद्यन्त योवनम् ॥

घनूर्ध्वं वेऽश्वपृष्ठे च गदायुद्धेऽसिचर्मणि ।

तथैव गजशिक्षायां नीतिशास्त्रेषु पारगाः ॥

इतिहासपुराणेषु नानाशिक्षासु बोधिताः ।

वेदवेदाङ्गः तत्तज्ज्ञाः सर्वत्र कृतनिश्चयाः ॥

(य० आदिपर्वणिसम्भव पर्व)

science. King Rituparna was an expert in the science of figures.¹ All the chief warriors in the Epics are noted for their knowledge of several arts. We should, therefore, in this connection agree with Acharya Chanakya who has shown the right way of selecting and grasping the essence of all knowledge².

As Dr. Diwan Chand has pointed out in his 'Short studies of the Upanishads' that in our present system of education excessive, almost exclusive, stress is laid on instruction at the expense of training. Instruction is understood to mean injection of facts and opinions. Our present education, according to him, suppresses originality and independence of thought. In ancient India, life was not so complex as to-day and both instruction and training could be secured more easily and cheaply. As regards the duty of the State towards education during the Vedic age, there is hardly any evidence. The ruins of the University of Nalanda and Taxila do suggest that there must have been a substantial contribution by the state as several thousands of students received education there. Several students came from foreign countries to these temples of learning. Kautalya had been a student at Taxila, the capital of Gandhara, the native land of Panini, the Grammarian. The educational process of the ancient times aimed at a definite objective and that objective was indicated in the exhortations given by the teacher to his students.³ The golden dream of reviving the ancient Gurukul tradition was seen by Daya Nand Saraswati. Shradha

(१) तं वृष्ट्वा बाहुकं राजा त्वरमाणोऽभ्यभाषत ।

ममापि सुत पश्य त्वं संस्थाने परमं बलम् ॥

(म० वनपर्वणि-नलोपाख्यानपर्वं)

(२) अनन्तशास्त्रं बहुलाश्च विद्या, अल्पदृक्कालो बहु विघ्नता च ।

यत्सारं भूतं तदुपासनीयं हंसो यथा क्षीरमिवान्धमध्यात् ॥

(बा० नी० १५।१०)

सर्वः सर्वं न जानाति सर्वज्ञो नास्ति कश्चन ।

नैकत्र परिनिष्ठास्ति ज्ञानस्य पुरुषे बभूवित् ॥

(म० वनपर्वणि-नलोपाख्यानपर्वं)

(३) सत्यं ब्रह्म । धर्मं धर । स्वाध्यायान्मा प्रमदः । आचार्याय प्रियं धनमाहुत्य प्रजातन्तुं मा व्यवच्छेदोः । सत्यान्न प्रमदितव्यम् । धर्मान्न प्रमदितव्यम् । कुशलान्न प्रमदितव्यम् । भूयं न प्रमदितव्यम् स्वाध्याय-प्रवचनाभ्यां न प्रमदितव्यम् ।

देवपितृ कार्याभ्यां न प्रमदितव्यम् । मातृदेवो भव । पितृदेवो भव । आचार्यदेवो भव । अतिथिदेवो भव । ग्राम्यनवद्यानि कर्मणि तानि त्वया सेवितव्यानि नो इतराणि । ग्राम्यस्माकं सुचरितानि तानि त्वयोपास्यानि नो इतराणि ।

एष आदेशः । एष उपदेशः । एषा वेदोपनिषत् । एतदनुशासनम् । एवमुपासितव्यम् ।

एवमुच्यंतदुपास्यम् ।

(तैत्तिरीयोपनिषद् ११ अनुवाक)

Nand laboured to realise the dream of Daya Nand. He did not want merely to revive the ancient tradition, but sought to re-orientate it by supplementing the old learning with teaching of modern Sciences. In ancient India Universities invariably used to be established in forests, while the Universities of Calcutta, Madras and Bombay which have completed a century of their existence have been growing in the thickest centres of population. It is surely difficult to adopt the Gurukul System of education these days on a large scale in our country, but the system of education does need a change. It has become costly and does not inculcate a sense of discipline among the taught to the same extent as the ancient system did. Lack of all-round discipline among the youth is a cause of social, economic and political discontent in the country. Indisciplined youth cannot acquit themselves well even in services where they enter. The different scandals in administrative services are the result of lack of character, integrity and discipline which can be permanently done away with by a suitable and scientific system of education. Such a system must imbibe the merits of both the ancient and the Modern.

Application of Varnashram Principle

Social life in a country is influenced by the concepts of the leading thinkers of the nation at a certain time. Gandhiji could not think of politics without religion and his belief in truth and non-violence changed the political atmosphere of the country. Like Ruskin he believed that life was more significant than wealth and as such any measure which did not advance the welfare of humanity was immoral and unethical. His Economics rests on certain basic postulates of Human values, Non-violence and Simplicity.

No other country in the world could show as clearly the basic unity and integration of the social sciences as was shown by India's ancient sages. The duties of different 'Ashramas' and of the different 'Varnas' of society were clearly specified. They were in accordance with the age of an individual as well as his calibre. The functions of the different classes and conditions laid down in the accepted scheme of the society were duly observed as prescribed. It was the duty of the sovereign to see that the "Varna - Ashram Principle" was fully carried out by the people because that alone could maximise the total welfare of the community. Manu, Vyas and Kautalya are unanimous on this

issue'. The individual, therefore, had his being and living conditioned and circumscribed by the social framework, but within that he had freedom of movement or action which clearly marked out the ancient Indian society.

Plain Living and High Thinking

Thinkers in ancient India believed in plain living and high thinking and it was on this ground that they devoted themselves to metaphysical enquiries. Although spiritualism dominated our master thinkers, our civilisation never neglected materialism. It would be wrong to presume that India's spiritualism was the outcome of poverty and disease. The doctrine of simple living went hand in hand with high thinking. Simple living was based on the ideal of the diminution of wants. It implied some sacrifice for the interest of the community at that time. In spite of all her philosophy and spiritualism, India has never lagged behind in the march of materialism. Complete renunciation of wants, as preached by some Sadhus of India, cannot take us very far and is bound to impede social and economic progress in the country. In this connection we can get some light from the mahabharat.²

Achievement of Four Pursharthas

An important fundamental concept of Indian culture was a belief in 'four Pursharthas'—Dharma, Artha, Kama and Moksha, also known as Chaturvarga. In English they can be

- (१) स राजा पुरुषो बन्धुः स नेता ज्ञासिता च सः ।
चतुर्णामाश्रमाणां च धर्मस्य प्रतिभूः स्मृतः ॥ (मनु० ७।१७)
राजा प्रशस्ति धर्मेण स्वकर्म निरताः प्रजः ।
विकर्मणिश्च ये केचित् तान् युनक्ति स्वकर्मसु ॥
(म० वनपर्व २०७।२६)

चतुर्वर्णाधमस्यायं लोकस्याचाररक्षणात् ।
नश्यतां सर्वधर्माणां राजा धर्मं प्रवर्तकः ॥

(कौ० ३।१।५०)

- (२) ह्रीर्हता बाधते धर्मं धर्मो हन्ति हतः धियम् ।
धीर्हता पुरुषं हन्ति पुरुषस्याधनं बधः ॥
अधनाद्धि निवर्तन्ते ज्ञातयः सुहृदो द्विजाः ।
अपुण्यावफलाद् वृक्षाद् यथा कुल्य पतन्निजः ॥
धनमाहुः परं धर्मं धने सर्वं प्रतिष्ठितम् ।
जीवन्ति धनिनो लोके मृता ये स्वधना नराः ॥

(म० उद्योगपर्व अ० ७२)

interpreted as four values namely—Moral, Economic, Instinctive and Spiritual. The Rishis recognised that these were the four urgent needs of man for which a synthesis in life was essential. Economic and Instinctive (Artha and Kama) values were essential for the attainment of which resort was made to Dharma. In the words of Valmiki we obtain Artha and Kama from Dharma. Artha and Kama as opposed to Dharma have no value. In our culture fair ends seldom justified unfair means. It is this philosophy which dominated the mind of Mahatma Gandhi and guided his actions. The four Purusharthas were regarded as interdependent and any one singly could not be achieved without the other. It has been very much emphasised in the Epics¹. With these principal aims of life, generally accepted by our thinkers, the relative emphasis on each was a matter rather of degree than of kind. The great law giver Manu declares that different individuals give relative importance to some of them, but pursuing all these together gives the best results in life². The acquisition and enjoyment of material wealth and the pleasure of the senses being recognised as a legitimate aim of human activity to be pursued by organised religious endeavour was the fundamental criterion of Aryan culture. The quantity needed for reasonable satisfaction could be regulated by other moral considerations. In fact, amongst the four Purusharthas our ancient law givers and writers considered Artha or material gain at par with Dharma, Kama and Moksha. It would be wrong to conclude that the individual should get himself engrossed only in the acquisition of material gain. The real spirit was to have an integration of the four qualities or values given above. It was only through integration and co-ordination of Dharma, Artha, Kama and Moksha that an individual could achieve the highest and the noblest in his life. We may interpret the concept of 'Chaturvarga' in a

- (१) (अ) धर्मविधेः प्रभवति धर्मात् प्रभवते सुखम् ।
धर्मेण लभते सर्वं धर्मसारमिदं जगत् ॥ (१० अरण्यकाण्ड)
- (ब) ये धनावपकर्षन्ति नरं स्वबलमास्थिताः ।
ते धर्ममर्थं कामं च प्रमथन्ति नरं च तम् ॥ (म० उद्योगपर्व अ० ७२)
- (स) सर्वथा धर्ममलोऽर्थो धर्मश्चायं परिग्रहः ।
इतरेतरयोनीतो विद्धि मेघोववी यथा ॥ (म० वनपर्व अ० ३३)
- (द) आपदेवास्य मरणात् पुरुषस्य गरीयसी ।
श्रियोविनाशस्तद्व्यस्य निमित्तं धर्मकामयोः ॥ (म० उद्योगपर्व अ० ७२)
- (२) धर्मार्थविरुध्यते श्रेयः कामार्थो धर्म एव च ।
अर्थ एवेह वा श्रेयस्त्रिवर्ग इति तु स्थितिः ॥ (मनु० २।२२४)
धर्मं चार्थं च कामं च यथावद् वदतां वर ।
विभज्य काले कालज्ञः सर्वान् सेवेत पण्डितः ॥ (म० वनपर्व अ० ३३)

different way in the changed circumstances of the country to build our National Economy. This interpretation may give an important place to Artha and Kama, but Dharma should be placed on the first rung of the Socio-Economic ladder. That would be a move in the right direction and would be in accordance with the ancient traditions of the country. According to our ancient ideals, men and women were to be equal partners in the pursuit of these aims and it appears that to-day women have a very vital role to play. They, with their greater participation in political, economic and social life of the country, can inspire men for harder work and greater sacrifices to achieve the lofty ideals. Achievement of such ideals would lead to the establishment of a society which would really be true, good and beautiful.

Foundations of Sarvodaya

The philosophy of 'Sarvodaya' now being talked about in the country has been with us in some form or the other since the earliest days of civilisation. The fundamentals of 'Sarvodaya' are based on a sincere attempt to understand the needs of other people. It was a view based on voluntary renunciation and mutual agreement. It embodied the principle of 'live and let live' which aimed at the good for all. The Upanishads, the Mahabharat and the Arthashastra of Kautilya openly declare for the welfare of all human beings without distinction whatsoever¹. Consistent with this philosophy, Gandhiji laid out his long range 'Sarvodaya Plan'. As Shri Jaiprakash Narain says :—

“Sarvodaya is Universal Philosophy of life capable of application to both the American and Russian civilisations as to the Indian civilisation. Sarvodaya when applied to the United States of America would not necessarily mean that Americans would have to destroy all their present technological developments and go back to the spinning wheel. The American people had merely to change their competitive, acquisitive and accumulative outlook in the interests of society. They have to change to

- (१) सर्वेषां यः सुहृन्निस्त्वं सर्वेषां च हिते रतः ।
 कर्मणा मनसा वाचा सधर्मं वेद जाजले ॥
 न भूतो न भविष्योऽस्ति न च धर्मोऽस्ति कश्चन ।
 योऽभयः सर्वभूतानां स प्राप्नोत्यभयं पवम् ॥ (म० शान्तिपर्व अ० २६२)
 विद्याविनीतो राजा हि प्रजानां विनये रतः ।
 अनन्यां पृथिवीं भुङ्क्षते सर्वभूतहिते रतः ॥

an outlook which is based on sharing what they have with others in the world and making sacrifices for their fellow beings". Would it not be possible for the Americans to regard themselves as trustees of wealth of the world? It would be in accordance with the policy of Sarvodaya if they change their outlook and share their wealth with the rest of the human family.

Marxism also claims that its aim is the welfare of all, but there is a difference. The first thing that strikes our mind when we compare Sarvodaya and Marxism, is a wide gulf in psychological and ethical atmosphere between them. Sarvodaya moves in the world of traditional ethics, traditional in all civilizations Eastern and Western. It follows the path of peace and non-violence. It appeals to daan (charity), yajna (sacrifice), yog (path-way of salvation) and dharma (social morality and religion).

Marxism is unfortunately committed to violence and application of force for ushering in a new society of Communism.

This brings us to the second point of difference between these social gospels. Marxism concentrates its attention on class and has little regard for the individual. Sarvodaya starts with the individual, Sarvodaya is a pathway for individuals to work out their salvation through a regulated life of self-fulfilment and self-sacrifice.

This difference of approach between Marxism and Sarvodaya leads naturally to a further characteristic difference between them on political grounds. Marxism has been irrevocably committed to centralization or nationalization of all economic activities. It is tied up with this policy because of its central doctrine of class war and class oppression by the owners of property. There is no aspect of life over which the Marxist State does not seek to exercise control. It is said to introduce a slavery in body, mind and soul. Sarvodaya denounces such a culmination. It, therefore, insists on decentralization of political and economic power. This is why Gandhiji stressed on revival of village economy. Even with regard to the fundamental value of freedom, Sarvodaya is a safer guide. For Marx'sm ends up with the dismissal of personal freedom as a 'bourgeois prejudice' while Sarvodaya insists on freedom first and last as the oxygen of human life.

Spirit of Sacrifice

A Spirit of sacrifice and suffering for a noble cause has always been the basis of Aryan culture. Those who have suffered and

sacrificed, have been worshipped as national heroes. The Vedic hymns suggest a life of dedication. Some prayers in the Yajurveda emphasize that our vital breath, eyes, ears, intellect, understanding, prosperity and knowledge be dedicated to service of humanity and sacrifice for others. Let the sacrifice itself be made in a spirit of utter abnegation.¹ We learn a lesson of sacrifice, suffering and service from the lives of Rama, Lakshman, Bharat, Hanuman and the Pandavas. In the Vana-Parva of the Mahabharat, sage Vyas told Yudhishtar that there was no other way of getting at the desired goal except through suffering.² Both the Vidur Niti and Chanakya Niti emphasize that an individual can be sacrificed for a family, a family for a community, a community for a country, a country for the world and finally the world for the soul.³

This spirit of sacrifice can also be interpreted in the common form of sacrificial ritual, evolved during the Vedic period in which fire played a very vital role. The Rigveda refers to several sacrificial priests and the most common materials used for oblations. In this period, the oblations consisted of milk, butter, grains and soma. Sacrifice, with its several ramifications may then be said to have played an important role in the making of Indian rituals. From the socio-historical point of view, sacrificial ritual may be said to have been instrumental in promoting communal solidarity and the development of what may be called 'Vyavahara-Dharma'. A reference may be made here to the non-ritualistic or secular side of the performance of sacrifice which must have encouraged the growth of many fine arts and technical sciences, because the 'Yagya' required a number of accessory articles and the preparation of suitable sites.

The institution of 'Yagya' had a vital economic interest for the priests, because they received Dakshina or sacrificial fees

(१) आययज्ञेन कल्पताम्, प्राणो यज्ञेन कल्पताम्
 चक्षुयज्ञेन कल्पताम्, श्रोत्रं यज्ञेन कल्पताम्
 मनोयज्ञेन कल्पताम्, आत्मायज्ञेन कल्पताम्
 ज्योतिर्यज्ञेन कल्पताम्, यज्ञोयज्ञेन कल्पताम् (यजु० १८-२९)

(२) तपसो हि परं नास्ति तपसा बिन्दते महत् ।
 नासाध्यं तपसः किञ्चिदिति ब्रुव्यस्व भारत ॥
 (म० वनपर्व अ० २५९)

(३) त्यजेदेकं कुलस्यार्थं ग्रामस्यार्थं कुलं त्यजेत् ।
 ग्रामं जनपदस्यार्थं आत्मायार्थं पृथ्वीं त्यजेत् ॥
 (आ० नी० ३।१०)

regarding which instructions are contained in the ethical codes. Examples are cited of the particular fees paid for the Rajsuya, Vajpeya and Agnishtoma sacrifices¹. Social relationships arising out of such sacrifices between priests and Yajman constituted one of the special features of domestic life. The Shatpatha Brahman refers to the Bharat kings as having performed the Ashwamedh sacrifice and points out that the performance of sacrifice is the best of all acts for a king. Manu, while discussing the duties of a house holder, points out several types of sacrifices and looks at the 'Soma sacrifice' from an economic point of view. He suggests that one, who stores food which may last for three years or more for maintaining himself and his dependents, is entitled to drink Soma. The sacrificer had to set apart the minimum prescribed store for reaching the end in view. One who began without it was not entitled to complete the sacrifice and reap the fruits².

Narad suggests in the Mahabharat that without Agnihotra and charity, the study of the Vedas and enjoyment of riches are not fruitful. The Bhagwat Gita mentions different types of sacrifices or Yajnas namely Brahma yajna, Dravya yajna, Tapa yajna, Yoga yajna, Swadhaya yajna and Gyana yajna. Like the Shatpath Brahman and Manusmriti, the Gita refers to the economic importance of Agnihotra or yajna. It is said to cause rainfall and thus be helpful in the growth of foodgrains in a country³. There is nothing surprising for 'Agnihotra' becoming instrumental for causing rainfall. If the Atom and Hydrogen bombs exploded at far away islands can cause radioactivity, dust-

- (१) ऋत्विजश्च यथा शास्त्रं राजसूयं महाकतुम् ।
पाण्डवस्य यथाकालं जुहुवुः सर्वयाजकाः ॥
यानि तत्र महोपेभ्यो लब्धं वा धनमुत्तमम् ।
तानि रत्नानि सर्वाणि विप्राणां प्रबदो तदा ॥
कोटीसहस्रं प्रबदो ब्राह्मणानां महात्मनाम् । (म० सभापर्व अ० ४५)
- (२) ऋत्विजं देवयज्ञं भूतयज्ञं च सर्वदा ।
नयज्ञं पितृयज्ञं च यथा शक्ति न हापयेत् ॥ (मनु० ४।२१)
यस्य त्रैलोक्यं भक्तं पर्याप्तं भूयद्वत्स्य ।
अधिकं वापि विद्येत स सोमं पातुमर्हति ॥
अतः स्वर्तपीयसि ब्रह्मे यः सोमं पिबति द्विजः ।
स पीतसोमपूर्वोऽपि न तस्याप्नोति तत्फलम् ॥ (मनु० ११।७-८)
- (३) अग्निहोत्रफला देवा इत्तभूतफलं धनम् । (म० सभापर्व अ० ५)
अग्निर्वं धूम्रो जायते धूम्राव् भ्रमभ्राव वृष्टिः । (श० ब्रा०)
अग्नी प्रास्तावृत्तिः सम्यगावित्यमुपतिष्ठते ।
आविश्याऽज्जायते वृष्टिर्बृष्टेरन्नं ततः प्रजाः ॥ (मनु० ३।७६)
अन्नाद्भवन्ति भूतानि पर्जन्यादन्नसंभवः ।
यज्ञाद्भवति पर्जन्यो यज्ञः कर्मसमुद्भवः ॥ गी० ३।१४ ॥

storms and rain in countries situated at considerable distances from the scene of explosion, one is apt to believe that 'Agni-hotra' conducted in a certain form might have caused rainfall in ancient times. In this way, such yajna might or must have purified the whole atmosphere.

Avoidance of Extremes

Another important fundamental concept in the Aryan culture has been a compromise of two extremes of idealism and realism. We have always preferred a golden mean. Our religion has always emphasized on the attachment with the world we live in as well as with the super-natural. Even in matters of food, enjoyment, work, sleep and awakefulness the Bhagwat Gita pleads for moderation to attain the highest efficiency¹. According to Atharva-veda, neither rationalism alone nor sentimentalism alone can take us very far. What is required is a compromise between head and heart in all our activities. At the very outset, Manusmriti lays down the need for a compromise between multiple desires and renunciation which is further supported by the Bhagwat Gita. In the Vana-Parva of the Mahabharat, we find Draupadi preaching to Yudhishtira a via media between great fury leading to harsh punishment and total forgiveness when she narrates a dialogue between Prahlad and Bali. The spirit of all that preaching is a compromise between the two extremes.²

Probably it is because of this inherent tradition of our culture that in guiding the economic and industrial activities of the state, our national government have chosen the path of a golden mean between the development of public and private sectors. Our government have accepted the principle of 'Mixed Economy' and have avoided the two extremes of capitalism and communism.

- (१) युक्ताहारविहारस्य युक्तचेष्टस्य कर्मसु ।
युक्तस्वप्नावबोधस्य योगो भवति दुःखहा ॥ (गी० ६।१७)
- (२) मूर्खानमस्य संसीध्यावर्षा हृदयं च यत् ।
मस्तिष्काद्बुद्धिर्ब्रह्मैरयत् पबमानोधि क्षीयते ॥ (अथर्व० १०।२।२६)
- कामात्मता न प्रशस्ता न च वेहास्यकामता ।
काम्यो हि वेदाधिगमः कर्मयोगश्च वैदिकः ॥ (मनु० २।२)
- न श्रेयः सततं तेजो न नित्यं श्रेयसी क्षमा ।
इति तात विजानीहि हृदयेतदसंशयम् ॥
तस्मान्नाभ्युत्सृजन् तेजो न च नित्यं मृदुभवेत् ।
काले काले तु सम्प्राप्ते मृदुस्तीक्ष्णोऽपि वा भवेत् ॥
काले मृदुर्यो भवति काले भवति दारुणः ।
तच्च सुखमवाप्नोति कोकेऽम्बुमिश्रितं च ॥ (म०वनपर्व० अ० २८)

CHAPTER III

DEMOCRATIC ORGANISATION, STATE REGULATION AND PUBLIC ENTERPRISE

सर्वे वर्णा राजधर्मप्रधानाः सर्वे वर्णाः पाल्यमाना भवन्ति ।
सर्वे त्यागा राजधर्मेषु दृष्टाः सर्वा दीक्षा राजधर्मेषु चोक्ताः ।
सर्वा विद्या राजधर्मेषु युक्ताः सर्वे लोका राजधर्मे प्रविष्टाः ॥

(म० शान्तिपर्व अ० ६३।२७-२९)

वरं न राज्यं न कुराजराज्यं । (चा० नीति ६।१३)

Origin of State

In a country, it is the political atmosphere which moulds economic policies. Political institutions chisel, mould and shape economic institutions. To statesmen, economic considerations are most vital. To trace the history of political organisation of the human race, we come across an idea that the world began with a golden age of perfection when no government was needed. This is evidenced by the Shanti Parva of the Mahabharat.¹ With the march of time, as population began to grow, man began to fear man. The strong began to exploit the weak and there was a need felt for an institution which could settle mutual dissensions and avoid a state of anarchy. It was due to this need that the state came into existence². Gradually its func-

- (१) नियतस्त्वं नरव्याघ्र भूयुः सर्वमशेषतः ।
यथा राज्यं समुत्पन्नमादौ कृतयुगेऽभवत् ॥
न च राज्यं न राजाऽऽसीन्न च दण्डो न दाण्डिकः ।
धर्मोऽयं प्रजाः सर्वा रक्षन्ति स्म परस्परम् ॥

(म० शान्तिपर्व अ० ५९।१३-१४)

मास्यन्यायाभिभूताः प्रजा मनुर्वैवस्वतं राजानं चक्रिरे ॥ (की० १।१३।६)

- (२) पाल्यमानास्तथान्योन्यं नरा धर्मेण भारत ।
क्षेत्रं परमुपाजगमुस्ततस्तान् मोह आविशत् ॥
ते मोहवशमापन्ना मनुजा मनुजवर्धभ ।
प्रतिपत्तिविमोहाच्च धर्मस्तेषामनोनशत् ।
नष्टायां प्रतिपत्तौ च मोहवश्या नरास्तदा ।
लोभस्य वशमापन्नाः सर्वे भरतसत्तम ॥

(म० शान्तिपर्व अ० ५९।१५-१६-१७)

अराजके हि लोकेऽस्मिन् सर्वतो विद्रुते भयात् ।
रक्षार्थमस्य सर्वस्य राजानमसृजप्रभुः ॥

(मनु० ७।३)

tions began to grow till almost the entire life of people came under its influence. The state in ancient India was regarded as the centre of society and the chief instrument of its welfare. At the same time, society also believed that its proper functioning and progress depended upon an efficient government. Ultimately the government became the key-stone of the gigantic arch of social life. Besides, there are some indications that a certain group of people believed in the divine origin of state. Manu in his Smṛiti points out that the king has powers which are bestowed by heavenly gods — Indra, Vayu, Yama, Surya, Agni, Varnu, Chandra¹ and Kuber. This theory did not gain much ground and was not upheld by subsequent thinkers. There is no evidence to uphold the view that the king was the representative of God as was believed in some other countries of the world.

Duties of the King

As a general rule, monarchy had been the system of the government prevailing in ancient India though we come across a reference of republican institutions as well in the Vedic literature, the Mahabharat and the Arthashastra. Evils of a kingless society are described in the Epics and the king was really synonymous with the government and the state². As such the duty of the king was not merely defence and maintenance of law and order in the country, but he had to regulate the social order, stimulate virtue and guide the moral and economic life of the people. He had to listen to the public

- (१) इन्द्रानिलयमार्कणामग्नेश्च वरुणस्य च ।
चन्द्रवित्तेशयोश्चैव मात्रा निहूँस्य शाश्वतीः ॥
यस्मादेषां सुरेन्द्राणां मात्राभ्यो निर्मितो नृपः ।
तस्मादभिवक्ष्येयं सर्वभूतानि तेजसा ॥ (मनु० ७।४-५)

- (२) इक्ष्वाकुवंशप्रभवः को न राजा भविष्यति ।
अराजकमिवं राष्ट्रे विनाशमुपयास्यति ॥
नाराजके जनपदे विद्युन्मालो महास्वनः ।
अभिवर्षति पञ्चग्यो महीं विद्येन वारिणा ॥
नाराजके जनपदे बीजमष्टिः प्रकीर्यते ।
नाराजके पितु पुत्राः सम्यक् तिष्ठन्ति शासने ॥ (रा० अ० का०)

अराजकेषु राष्ट्रेषु धर्मो न व्यवतिष्ठते ।
परस्परं च क्षादन्ति सर्वथा विगराजकम् ॥
नाराजकेषु राष्ट्रेषु वस्तुव्यमिति रोचये ।
नाराजकेषु राष्ट्रेषु हृदयमग्निर्वहस्यत ॥

(म० आग्निपर्व अ० ६७।३-५)

voice; his position was that of the 'Servant of State'. A perfect king always sought the good of the people. King Rama is said to have given up his wife Sita in regard to the wishes of his subjects. According to Kautilya, a king could have no personal likes or dislikes; it were the likes and dislikes of the subjects that were to be followed by him. The State under monarchy was a trust and the object of this trust was direction, regulation for the good of agriculture, prosperity, growth and welfare of the people. To perform this paramount duty the king himself had to be virtuous and of good character. Vedic Rishis, Valmiki, Vyas, Shukra and Kautilya have emphasised this quality to be essential for a king¹. These ancient thinkers have prescribed a daily round of duties to which a king was expected to conform. The day and the night were each divided into eight parts for such round of duties. The king was expected to get up early in the morning and to look to the affairs of the state, in consultation with his ministers, according to the scheduled time². A round-the-clock activity carried on by kings in ancient India has a lesson for rulers in our country and the world.

Democratic Set-Up

The Vedic king was elected by the people assembled in the Samiti. The Sabha and Samiti, a sort of bicameral legislature, appear to have a big hold in appointing, advising and control-

- (१) ब्रह्मचर्येण तपसा राजा राष्ट्रं विरक्षति (अथर्व० ११।५।१७)
 चारित्र्येण च को युवतः सर्वभूतेषु को हितः ।
 विद्वान् कः कः समर्थश्च कश्चैकप्रियवशानः ॥
 इक्ष्वाकुवंशप्रभवो रामो नाम जनैः भूतः ।
 धर्मज्ञस्तस्यसम्पदश्च प्रजानां च हिते रतः ॥ (रा० बा० का०)
 शात्रुष्वङ्घ्रिर्गन्तुस्तु जामदग्न्यो जितेन्द्रियः ।
 अश्वरोह च नाभागो बभूवासे चिरं महोम् ॥ (की० १।६।१५)
- (२) उत्थाय पश्चिमे यामे कृतशोचः समाहितः ।
 हुताग्निर्वाह्याग्निश्चाह्वयप्रविशेत्सशस्त्रांशभाम् ॥
 विसृज्य च प्रजाः सर्वान्मन्त्रयेत्सह मन्त्रिभिः ॥ (मनु ७।१४५।१४६)
 नाडिकाभिरहुरष्टधा रात्रिं च विभजेत् ॥ तत्र पूर्वं द्विवसम्याष्टभागं
 रक्षविधानमायव्ययो च शृणुयात् ॥ द्वितीये पौरजानपदानां कार्याणि
 पश्येत् ॥ तृतीये स्नानभोजनं सेवेत ॥ स्वाध्यायश्च कुर्वीत ॥ पञ्चमे
 मन्त्रिपरिषदा पत्रसंप्रेषणेन मन्त्रयेत् ॥ (की० १।१९)
 सर्वमाययिकं कार्यः शृणुयात्तातिपातयेत् ।
 कुक्कुत्साध्यमतिक्रान्तमसाध्यं चाभिजायते ॥ (की० १।१९।३५)

ling the king¹. Both Manu and Yagnavalkya believe in the assistance of capable ministers for the king in running the administration of the State. Kautilya, a great advocate of monarchy, writes that matters of state should be discussed by the council of ministers and the king should carry out the majority view². The king could not be above law and his policy and conduct could be criticised in the country. The king remained anxious to know such criticism. As already pointed out, a king went to the extent of sending his wife in exile due to such criticism by one of the commonest man of the society. Can we, therefore, claim that the popular slogan of democracy—a Government of the people, by the people and for the people—enunciated by the late Abraham Lincoln had already been evolved and practised in this country long before it was known to the West? Even to-day, it is claimed by some that India is one of the biggest democracies of the world. We are thus trying to move according to our ancient traditions where the ideal of the state was good, efficient and popular government.

An Ideal Government

According to Chhandogya Upanishada, there was no thief, no miser; no drunkard, no ignorant, no unchaste man and woman in the kingdom of king Ashwapati¹. During Rama's reign, it has been pointed out, the Earth was full of grain and the trees were full of fruits. His kingdom was said to be

- (१) सभा च मा समितिश्चावतां प्रजापतेर्बृहतरौ संविदौ ।
येना संगच्छा उप मास शिक्षाश्च बहानि पितरः संगतेषु ॥
विद्वन् ते सभे नाम नरिष्ठा नाम वा अस्ति ।
ये ते के च सभासवस्ते मे सन्तु सबावसः ॥ (अथर्व० ७।१२।१-२)

- (२) मीलान्छास्त्रविदः शराल्लङ्घनक्षत्रकुलोद्गतान् ।
सचिवांसप्त चाष्टौ वा प्रकुर्वीत परोक्षितान् ॥
तेषां स्वं स्वमभिप्रायमुपलभ्य पृथक् पृथक् ।
समस्तानां च कार्येषु विद्वद्याद्वितमात्मनः ॥
सर्वेषां तु विशिष्टेन ब्राह्मणेन विपश्चिता ।
मन्त्रयेत्परमं मन्त्रं राजा वाङ्मन्यसंयुतम् ॥ (मनु० ७।५४-५७-५८)
मन्त्रिपरिषद् द्वावशामास्यान्कुर्वीतेति मानवाः ॥ षोडशेति बार्हस्पत्याः ॥
विंशतिमित्योजनसाः ॥ यथासामर्थ्यमिति कौटिल्यः ॥ आत्ययिके कार्ये
मन्त्रिणो मन्त्रिपरिषद् चाहूय ब्रूयात् ॥ तत्र यद्भूयिष्ठाः कार्ये
सिद्धिकरं वा ब्रूयुस्तत्कुर्यात् ॥ (कौ० १।१५)

- (१) न मे स्तेनो जनपदे न कर्ष्यो न मज्जपः ।
नानाहिताग्नितीक्ष्णान् न स्वैरी स्वैरिणो कुतः ॥ (छा० उप० ५-११-५)

free from evil doers and no calamity ever befell any one. Every body was happy and devoted to Dharma¹. That is why Gandhi ji dreamt of 'Ram Rajya' to be established in our country even after the political freedom was won. In a healthy polity, all classes of a community should have sufficient food, sufficient clothing, sufficient shelter for the people and practically all blessings of a good life for the citizens of the state. A picture of such a polity is provided by the Mahabharat in the description of the reign of king Yudhishtira². The master mind of Kautalya always aimed at stable and efficient government and that is why he laid so much emphasis on the training and discipline of the king.

The system of village self government was the foundation of the Aryan polity. It appears that the village formed the basis of the constitution of Vedic Samiti and the village headman popularly known as the 'Gramini' was the key-stone of the village organisation. Manu has also referred to a sound system of village organisation in which villages were to be grouped in two, three, five or hundred for their defence. There were also separate organisers for units of one, ten, twenty, hundred and a thousand villages to look after their multifarious

(१) अभिषेके तवर्हस्य तदा रामस्य धीमतः ।
भूमिस्तस्यवती चंद फलवन्तश्च पावपाः ॥
निर्बस्युरभवत्लोको नानर्थः कञ्चिदस्पृशत् ।
न च स्म वृद्धा बालानां प्रेतकार्याणि कुर्वते ॥
सर्वं मुदितमेवासीत् सर्वो धर्मपरोऽभवत् ।
राममेवानुपश्यन्तो नाभ्यर्हसन् परस्परम् ॥ (बाल्मीकि रामायण)

(२) प्रियवादी सदा वान्तो भव्यः सत्यपरो जनः ।
हृष्टः पुष्टः शुचिर्बल्यो यत्र राजा युधिष्ठिरः ॥
नासूयतो न चापौरुर्नाभिमानो न मत्सरी ।
अविद्यति जनस्तत्र स्वयं धर्ममनुव्रतः ॥
ब्रह्मघोषाश्च भूयांसः पूर्णादुरत्यस्तथैव च ।
कतवश्च अविद्यन्ति भूयांसो भरिदक्षिणाः ॥
सदा च तत्र पञ्चम्यः सम्यग्वर्षा न संशयः ।
सम्पन्नसस्या च सहो निरातङ्का अविद्यति ॥
गृण्वन्ति च धान्यानि रसवन्ति फलानि च ।
गन्धवन्ति च माल्यानि शुभशब्दा च भारती ॥
गृण्वन्ति च पेयानि भोज्यानि रसवन्ति च ।
तत्र देशे अविद्यन्ति यत्र राजा युधिष्ठिरः ॥
रसाः स्पृशन्ति गन्धाश्च शब्दाश्चापि गुणान्विताः ।
वृद्धानि च प्रसन्नानि यत्र राजा युधिष्ठिरः ॥ (म० वि० प० २८।१६।२५)

problems¹. The central problem of economic and political development in our country is the creation of sound village leadership which will command the confidence of the villagers, place before them new objectives, create a desire for better life and mobilise them in a common endeavour to accomplish programmes of community betterment. It may be that taking clue from our ancient system, the national government of the country have tried to revive the village organisation and it is believed that with a sound Gram Rajya, Gandhi's dream of 'Ram Rajya' may become a reality.

Role of The State

The part played by government in social and economic activities of the country has depended upon different needs at different periods and stages of the growth of society. The close touch of government with the economic life of people may lead to good or evil according to the nature and methods of government action. The state may appropriate to itself larger share of economic functions which may, under certain conditions, encroach upon the economic freedom of individuals. On the other hand by imposing proper limitations on its own activity, it can, under certain circumstances, furnish considerable aid to individual enterprise, regulate and strengthen it by its superior power and wisdom. Probably it was because of the evils of too much state intervention in the economic life of the people that Gandhiji was apprehensive of the growing power of the state. In his writings he once pointed out that he looked upon an increase in the power of the state with the greatest fear, because while apparently doing good for the people by minimising exploitation, it does the greatest harm to mankind by destroying individuality which lies at the root of all progress. What he preferred was not a centralisation of power in the hands of state but an extension of the sense of trusteeship, as in his opinion violence of private enterprise was less injurious than the violence of the state.

The main current of the history of economic thought is determined by the ebb and flow of government interference in economic life. The concept of state intervention in matters economic has a chequered history in Western countries. The mercantile system was the dominant form of economic thought in

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- (१) द्वयोस्त्रयाणां पञ्चानां मध्ये गुरुमभिष्ठितम् ।
 तथा ग्रामराजानां च कुर्याद्विद्वस्य संग्रहम् ॥
 ग्रामस्याधिपतिः कुर्याद्विद्याग्रामपतिः तथा ।
 विद्यातोषां शतेषां च सहस्रपतयेव च ॥ (मनु० ७।११४-११५)

Europe from 16th to 18th century and it was clearly the pattern of the practical statesmanship of the times. Thomas Mun, perhaps England's *Manu* at a time, was the ablest exponent of Mercantilism and he defended the principles of Mercantilism to justify the practices of the East India Company. The Mercantilist state had to be a highly controlled social organism. But it had its reactions which took a strong turn in France.

The Physiocratic doctrines which arose in France as a reaction against Mercantilism were based mostly on the philosophy of Natural Order. The Physiocrats had a great distrust for man-made laws. The ideal of the Physiocratic State was 'minimum of legislation with maximum of authority'. The Physiocrats broke completely with the past and established a new order of economic life. Quesney and Turgot were representative leaders of this school of thought, but Adam Smith stands forth as the great critic of Mercantilism and the chief exponent of the doctrine of individual freedom in trade which was a part and parcel of his Natural Order. The declaration of independence and the 'Wealth of Nations' were given to the world in 1776. One was a declaration of political freedom, the other proclaimed industrial and commercial independence. The new economic society which Smith proposed was to be regulated by competition. Economic privileges and monopolies were to be destroyed. Adam Smith's *Wealth of Nations* was a landmark in economic thought and its effect on the thoughts and actions of the people was extraordinary. *Laissez-Faire* or economic liberty is writ large in the 19th century code of relationship between government and business.

In spite of his defence of the *Laissez-Faire* policy, Smith saw vast opportunities for a positive contribution by the government to its people¹. Mercantilist ideal was not completely dead and in the writings of Frederick List the emphasis upon a distinctive national economy was given its strongest expression. List criticised Smith and pointed out that England's stage of economic development was quite different from that of Germany and America and, therefore, Smith's principles were not universally applicable. This trend of economic thinking moved on with the march of time and in the first quarter of the 20th century *Laissez-Faire* was given a good bye. The world, as a whole, is now moving towards greater state intervention and public control. It is believed that in many countries of the world to-day there is mercantilist planning. This thought is older in India and dates

¹ Basic teachings of the great economists.—by John W. McConnell.

back to the 4th century B.C. A picture of mercantilism is obtained from Kautilya's Arthashastra which gives us a highly organised system of political and economic machinery. There were a number of supervisors and superintendents for an efficient conduct of political and economic life of the country¹. Kautilya's philosophy was not so narrow as the philosophy of the Mercantilists. He gave a concept of enlightened self-interest in economic behaviour. State protection was justified only when it was used with discrimination. State intervention was advocated with certain limitations and restrictions. The entire administration of economic affairs was conducted by means of specialised governmental agencies. For achievement of Bentham's utilitarianism, the best policy was Laissez-Faire and minimum government activity, but according to our philosophy this could be well done through the intervention of the state.

The Growth of The Concept of State Intervention

The supporters of the theory of Laissez-Faire in the West had failed to realise the proper significance of social good and neglected welfare of the people. It was behind the shield of free trade in England that a wealthy and powerful minority flourished on the exploitation of the people. The evils of Laissez-Faire gave birth to its antithesis in the philosophy of Karl Marx. The influence of Marx on the later socialist thought and practice has been tremendous. Marxist ideas have also considerably influenced non-communist thinkers. The Russian Revolution stirred the imagination of the socialists all over the world. Among the modern economists, John Mayard Keynes, who was considered as favourably inclined towards private enterprise, attacked the policy of let alone. Keynes rejected the view point of the classical school and demanded that the Laissez-Faire policy should finally be given up, because without state intervention the economic system could not possibly work smoothly.

Among the American economic thinkers, Veblen considered that classical economics was wrong because it based itself on individualism and self-interest as motives of human behaviour. He was sharply critical of capitalism and believed that each new situation calls for a fresh explanation keeping in view considerations of numerous factors—social, political and

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- (१) कोष्ठागाराध्यक्षः, आकराध्यक्षः, पण्याध्यक्षः, कुप्याध्यक्षः, आबुबागाराध्यक्षः,
तुलानामपोतबाध्यक्षः, शल्काध्यक्षः, सूत्राध्यक्षः, सीताध्यक्षः, सुराध्यक्षः, सूनाध्यक्षः,
गणिकाध्यक्षः,
नाबाध्यक्षः, गोड्यक्षः, अहवाध्यक्षः, हस्त्यध्यक्षः, रबाध्यक्षः, मुद्राध्यक्षः, विबीताध्यक्षः।
—(की० अर्पणसास्त्र)

economic. Just as business and labour in the United States to-day differ from the European types, so also does government action. The principles on which federal and state policies are based are embodied in the Declaration of Independence of 1776. At first, government action was mainly concerned with the protection of the American market against external economic competition.

In a second period, government action was also concerned with struggle against internal monopolies. In the United States the fight against monopolies has been carried on through anti-trust legislation, the regulation of public utilities and banks through measures such as the Wagner Act. Labour and management, producers and consumers, investors and borrowers, agriculture and industry are all elements of the economic system to which the application of the authoritarian measures keeps the economic system going. When the New Deal in America courageously applied a new principle—the principle of large scale government intervention in the nation's economic and social life, vast changes were inevitable. Government policies in the United States have an importance to-day which they did not have in the past. The American Congress has found it necessary to legislate in a number of fields and in particular concerning foreign trade, currency, credit, public works utilities, agriculture and social security. The American laws form a system very different of course from the system giving unity to collectivist, corporate and neo-mercantilist legislation.¹

A review of the two apparently opposed systems of Communism and Capitalism will show that both the systems accept the necessity of maintaining and increasing employment, preventing business failures. The methods and techniques evolved in the two systems, however, differ materially. In the Russian, emphasis is laid on collective or State ownership of the means of production and on governmental management of prices and fixation of incomes. In the American, on the other hand private ownership of the means of production dominates the economy; but suitable expedients are being devised to ensure that continuity of production may not be disturbed and employment affected through business failures. The day is fast disappearing when the individual could pursue his own economic ends in his own way. The sector of private economic pursuits is being steadily narrowed and the sphere of governmental supervision, control and even ownership is rapidly

(1) American Reporter Book Supplement Feb. 27, 1957.

widening. The role that the statesman has to play in the fashioning of economic well-being is, therefore, of unmistakable importance. In the post-war period world, international capitalism has weakened. India's choice is clear because she is committed to a path of golden compromise between two extremes from its ancient tradition.

India Shows The Light

May it not be taken as Vanity or self-praise to say that from the beginning of human history Indian ideals of government have materially differed from those of the West. The ancient Aryan State had its own characteristics. Though supreme and all comprehensive, it never contemplated to interfere considerably in individual liberty. 'The State is all' and the view that the individuality of the citizen must be merged into the individuality of the state was not favoured. What are known as the ministrant and constituent functions of the state i. e. those promotive of general welfare and those preventive of lawlessness and disorder were judiciously performed. All social programmes, principles and policies were intelligently and systematically introduced in our economic, Political and social life. Social welfare was unanimously accepted as the ultimate end of the policy. This has been our sound tradition and the country's noble heritage for millenniums past. It was with a view of social justice that the state in ancient India tried to interfere with the actions of individuals in the economic field. Private enterprise, with a capitalistic regime and minimum possible restriction by government, was not allowed by the state in ancient India.

The state encouraged right type of social institutions. It is a matter of recorded ancient Hindu history that holy rishis who had renounced the world and had migrated to the hills used to come down to inspect and cross-examine the society and the ruler. They used to praise the worthy and punish the errants. The rishis had the authority to replace the rulers who deviated from Raj Dharma¹. On the very face of it, there appears to be

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- १ (अ) वेदोपनिषदां वेत्ता ऋषिः सुरगणाधिपतिः ।
 इतिहासपुराणज्ञः पुराकल्पविज्ञोऽपि ॥
 न्यायविद् धर्मतत्त्वज्ञः षडङ्गविदनुत्तमः ।
 ऐश्वर्यसंयोगनानात्वसमवायविज्ञारवः ॥
 लोकाननुचरन् सर्वानागमत् तां समा नृप ।
 नारवः सुमहातेजा ऋषिभिः सहितस्तदा ॥

(शेष अगले पृष्ठ पर)

something super-natural behind it. It is just possible that the rishis, being the most learned, might have lived aloof from the political scene and might have resided in the forests or the hills. It can be assumed that they might have guided the king from their ripe experience and wisdom. It would not be too far fetched to compare the role of Mahatma Gandhi in guiding the destiny of the nation after the achievement of independence. Like a rishi he guided, though for a short time, the Nehru government and saved it from many pitfalls. Such a rishi in the past was a friend, philosopher and guide of a monarch in the Epic age. The principles of government laid down by such holy and learned men were based on the need for securing necessities of life to all individuals who were not deliberate shirkers. Comforts and luxuries could be obtained in accordance with the quality of work. The ancient scheme of social organisation and state regulation endeavoured to bring about a just compromise between extreme type of private enterprise and extreme type of state control and operation and between too little and too much government interference. A glance through India's ancient history will show that government action in the political, economic and social life of the country has been

कश्चिदर्थश्च कल्पन्ते धर्मं च रमते मनः ।
 सुखानि ज्ञानभूयन्ते मनश्च न बिहग्यते ॥
 कश्चिदाचरितं पूर्वमनरेव पितामहः ।
 वर्तते वृत्तिमग्रां धर्मार्थसहितां त्रिषु ॥
 कश्चिदर्थेन वा धर्मं धर्मणार्थमपि वा ।
 उभौ वा प्रीतिसारेण न कामेन प्रबाधते ॥
 कश्चिदर्थं च धर्मं च कामं च जयतां वर ।
 विभाज्य काले कालज्ञः सदा वरद सेवते ॥

(म० नारदउवाचः सभापर्व अ०५)

- (ब) कश्चिज्जितेन्द्रियो राजा कश्चिदस्यान्तरा जिताः ॥
 कश्चिदेवां प्रियो राजा कश्चिद् राज्ञः प्रियाः प्रजाः ।
 विजिज्ञासुरिह प्राप्तस्तवाहं राजसत्तमा ॥

(म०शान्तिपर्व अ०८२ कालकवृक्षीयमनुस्ववाच)

- (स) अतराष्ट्र महाप्राज्ञ निबोध वचनं मम ।
 वक्ष्यामि त्वां कीरवाणां सर्वेषां हितमुत्तमम् ॥
 न मे प्रियं महाबाहो यद् गताः पाण्डवा वनम् ।
 निकृत्या निकृताश्चैव दुर्योधनपुरोगमः ॥
 तदर्थं किं नृ पापात्मा तव पुत्रः समन्वधीः ।
 पाण्डवान् नित्यसंकुटो राज्यहेतोर्जिघांसति ॥
 ततः संसर्गजः स्नेहः पुत्रस्य तव पाण्डवः ।
 यदि स्यात् कृतकार्योऽद्य भवेत्स्वं मनुजैश्चर ॥

(म०वनपर्व अ०८ व्यासउवाच)

permeated with a sense of social justice and respect for the dignity of the human being. Long before the city-states came into existence in the west, the republican system had been established in this country and the system of government of these republics was based on the utilitarian ideal of the greatest happiness of the greatest number.¹

Ancient Concept of A Welfare State

Welfare economics and the concept of a welfare state may be comparatively new to the west, but in ancient India it had been the basis of social and political organisation of the country. Social welfare was a part and parcel of political and economic philosophy of our country. In India, the welfare aspect of economic policy is probably the one on which there has been the widest possible agreement among all thinkers of the past. As already pointed out, the jurisdiction of the state in ancient India extended over all the spheres of life of people, but it did not interfere with legitimate individual liberty. The Vedic state or monarch performed both constituent and ministrant duties. There are hymns in the Rig and Atharva Veda which indicate that the monarch was expected to be strong enough to protect his subjects from foreign aggression and maintain internal order by enforcing respect for the social and traditional law, morality and Dharma. The Yajur Veda hymns suggest that the king himself was to get respect and popularity among his subjects by developing welfare activities². The twin political institutions—Sabha and Samiti—were to exercise requisite control and advise the king for his multifarious duties. The Rig and Atharva Veda hymns quoted below throw light on the administrative duties of the king by which

(१) यादवाः कुरुरा भोजाः सर्वे चान्धकवृणयः ।

त्वय्यासक्ता महाबाहो लोका लोकेश्वराश्च ये ॥

उपासते हि त्वद्बुद्धिमृषयश्चापि माधव ।

त्वं गृहः सर्वं भूतानां जानीषे त्वं गतागतम् ।

त्वामासाद्य यदुधेष्टमेधन्ते यादवाः सुखम् ॥

(म० शान्ति पर्व अ० ८१।२९-३०)

(२) आ ब्रह्मन् बाह्यणो ब्रह्मवर्चसो जायतामा राष्ट्रे, राजन्यः शूर इवश्रयोऽतिव्याधो
महारथो जायतां, दोग्ध्रो धेनुर्बोढान्द्वानाशुः सप्तिः पुरन्ध्रयोषा जिष्णू रथेष्टः
समेयो युवास्य यजमानस्य बीरो जायतां । निकासे-निकासे नः पञ्चन्यो वर्धतु फलवत्यो
न ओषधयः पच्यन्तां योगक्षेमो नः कल्पताम् ॥

(यजु० २२।२२)

he was to suppress anti-social elements and punish the guilty.¹ The Atharva Veda gives a picture of a state which, if not well administered by the king with the help of intellectuals for the good of people, may result in anarchy and disorder². We can, therefore, infer that the concept of a welfare state is so ancient in India as the vedas.

Manu's Concept of State Regulation

There are several references in Manu-smriti's 'Raj Dharma' which should convince us against a policy of Laissez-Faire. On the other hand, the king was to regulate social and economic life of the people. Manu expected the king to be very conscious, watchful and alert for performing the primary duties of defence and maintenance of law and order in his kingdom. The king was to deal with thieves, robbers and gamblers with a firm hand, because on the defence and good administration of the kingdom depended the prosperity of king himself. Though the king was to love his subjects like a father, yet he could not carry on without taxation of his people for social good. Manu suggested that in this sphere the king was to be sometimes harsh, sometimes very sweet and there by maximise his own as well as his people's welfare³. The king was to interfere in and decide 18 kinds of disputes

- (१) वधोहि दस्युं घनिनं घनेन एकश्चरन्नपशाकेभिरिन्द्र ।
घनोरधि विषुणक्ते व्यापन्नयज्वानः सनकाः प्रेतिमीयः ॥
(ऋ० १।३।३४)

वि जानीह्ययान्ये च दस्यवो बहिष्मते रन्धया शासद्व्रतान् ।
शाकी भव यजमानस्य चोदिता विश्वेत्ता ते सधमादेश्चाकन ॥
(ऋ० १।५।१८)

इमे तुरं मरुतो रामयन्तीमे सहः सहस आनमन्ति ।
इमे शंसं वनूयतो नि पान्ति गृह द्वंषो अरक्षे दधन्ति ॥
(ऋ० ७।५६।१९)

- (२) नास्य जाया क्षतवाही कल्याणी तल्पमाश्रये ।
यस्मिन् राष्ट्रे निरुध्यते ब्रह्मजायाश्चित्या ॥
न विकर्णः पृथुशिरास्तस्मिन् वेदमनि जायते । यस्मिन् राष्ट्रे ॥
नास्य श्वेतः कृष्णकर्णो घुरि युवतो महीयते । यस्मिन् राष्ट्रे ॥
नास्य क्षेत्रे पुष्करिणी नाण्डिकं जायते विसम् । यस्मिन् राष्ट्रे ॥
नास्मि पृथिनं वि दुहन्ति यस्या दोहमुपासते । यस्मिन् राष्ट्रे ॥
(अथर्व० ५।१७।१२-१७)

- (३) यथोद्वरति निर्वता कक्षं धान्यं च रक्षति ।
तथा रक्षेन्नृपो राष्ट्रं हन्याच्च परिपन्थिनः ॥
शेष अगले पृष्ठ पर

of his people in which a judicious and wise settlement led to Social welfare. Manu insisted for the prevalence of truth over falsehood and upholding of 'Dharma' because in its absence we would all be destroyed.¹ The present law courts in India and the world over, whether they are national or international, can profitably take a lesson from this guiding principle of Manu in the administration of justice.

The economic field was not left untouched. The king had to regulate economic life with a certain standard. Taxation was carefully fixed for different types of people carrying on commercial and economic activities. There were regulations even for washermen as well as weavers. The King was to punish those who indulged in prohibited exports and also those who tried to evade the payment of octroi duties. Weights and Measures were regulated and reviewed from time to time. Gambling was an offence which was punishable by the king. Manu suggested that if the employees and administrators of the State did not deal effectively with criminals, drunkards, thieves and those who indulged with the wives of their teachers, the king himself was to be held responsible for these evils.²

मोहाद्वाजा स्वराष्ट्रं यः कर्षयत्यनवेक्षया ।
सोऽचिराद्भ्रश्यते राज्याज्जीवितान् च सबान्धवः ॥
शरीरकर्षणात्प्राणाः क्षीयन्ते प्राणिनां यथा ।
तथा राज्ञामपि प्राणाः क्षीयन्ते राष्ट्रकर्षणात् ॥
राष्ट्रस्य संग्रहे नित्यं विधानमिदमाचरेत् ।
सुसंगृहीतराष्ट्रो हि पाथिवः सुखमेधते ॥ (मनु० ७।११०-११३)

तीक्ष्णश्चैव मृदुश्च स्यात्कार्यं बोक्ष्य महीपतिः ।
तीक्ष्णश्चैव मृदुश्चैव राजा भवति संमतः ॥ (मनु० ७।१४०)

- (१) प्रत्यहं देशदृष्टंश्च शास्त्रदृष्टंश्च हेतुभिः ।
अष्टादशसु मार्गेषु निबद्धानि पृथक् पृथक् ।
एषु स्थानेषु भयिष्ठं विवादं चरतां नृणाम् ।
धर्मं शाश्वतमाश्रित्य क्रुपति कार्यचिन्तयम् ॥ (मनु० ८।३-८)
यत्र धर्मो ह्यधर्मेण सत्यं यत्रानृतेन च ।
हन्यते प्रेक्षमाणानां हतास्तत्र सभासदः ॥
धर्म एव हतो हन्ति धर्मो रक्षति रक्षितः ।
तस्माद्धर्मो न हन्तव्यो मानो धर्मो हतोऽवधीत् ॥ (मनु० ८।१४-१५)

- (२) यत्किञ्चिदपि वर्षस्य दापयेत् करसंज्ञितम् ।
व्यवहारेण जीवन्तं राजा राष्ट्रे पृथग्जनम् ।
कायकांश्छित्पिनश्चैव शस्त्रांश्चात्मोपजीविनः ।
एकैकं कारयेत्कर्म मासि मासि महीपतिः ॥ (मनु० ७।१३७-१३८)
(शेष अगले पृष्ठ पर)

Vyas's Concept Of A Welfare State

Mahatma Vyas, in his concept of a welfare state, is in line with Manu, because Bhishma in the Shanti Parva of the Mahabharat, refers to a dialogue between Vasumana and Brahaspati where the necessity and working of a welfare state is clearly discussed. This discussion includes all measures to be taken by the king for maintaining and increasing social, economic and political welfare of the People. It does emphasise that in the absence of positive measures being taken by the king, agriculture, commerce and industry would perish. The cattle wealth of the country would deteriorate. It points out that with the active participation and interference of the king, smooth, peaceful and stable progress of the State is possible. At another place in the Shanti Parva, Bhishma tries to give an analysis whether the king is the maker of good or bad times or the time is the maker of good or bad kings. He gives his judgement in favour of king being the maker of times. He, therefore, asked Yudhis- tra to take recourse to a policy of reasonable and righteous intervention with a firm hand and to look to the welfare of his kingdom.¹ The evidence of the Mahabharat shows that the

शात्मलोफलके इलक्षणे नेनिज्यान्नेजकः शनः ।
न च वासांसि वासोभिनिर्हरेन्न च वासयेत् ॥
तन्तुवायो दशफलं दद्यादेकपलाधिकम् ।
अतोऽन्यथा वर्तमानो वाप्यो द्वादशकं दमम् ॥
शूलकस्थानेषु कुशलाः सर्वपण्य विचक्षणाः ।
कुर्युरर्थं यथापण्यं ततो विशं नृपो हरेत् ॥
राज्ञः प्रख्यातभाण्डानि प्रतिषिद्धानि यानि च ।
तानि निर्हरतो लोभात्सर्वहारं हरेन्नृपः ॥
तुलामानं प्रतीमानं सर्वं च स्यात्सुलक्षितम् ।
षट्सु षट्सु च मासेषु पुनरेव परीक्षयेत् ॥

(मनु० ८।३९६-३९९-४०३)

एवं सर्वं विषायेदमिति कर्त्तव्यमात्मनः ।
युक्तदत्तंवाप्रमत्तश्च परिरक्षेद्विमाः प्रजाः ॥
विक्रोशन्त्यो यस्य राष्ट्राण् हियन्ते वस्यभिः प्रजाः ।
संपश्यतः सभृत्यस्य मृतः स न तु जीवति ॥
क्षत्रियस्य परोधर्मः प्रजानामेव पालनम् ।
निश्चितफलभोक्ता हि राजा धर्मेण युज्यते ॥

(मनु० ७।१४२-१४४)

- (१) ममेदमिति लोकेऽस्मिन् न भवेत् सम्परिग्रहः ।
न दारा न च पुत्रः स्यान्न धनं न परिग्रहः ।
विष्वग्लोपः प्रवर्तेत यदि राजा न पालयेत् ॥

(शेष अगले पृष्ठ पर)

sphere of the state activity was sufficiently extended and the policy of Laissez-Faire did not have any hold. Just like Manu-Smriti, the Mahabharat indicates that the king should look upon his subjects with fatherly affection, but for administering justice and dealing with evil-minded people, a fair and stern policy should be followed. The Mahabharat suggests that income from gold-mines, salt deposits, foodgrains-godowns, centres of transit on rivers and the herds of elephants should be looked into by ministers of state or those who could be fully relied upon by the king¹.

State Regulation According To Kautilya's Arthashastra

The Artha Shashtra of Kautilya also relates to all aspects of human life. A survey of the nature and scope of activities of the state as envisaged by the Arthashastra will show that it contemplated largely for a welfare state. It regarded the king as the trustee of the population. The state was to impose the social order and to encourage education, learning and art. According to the Arthashastra, the merchant was an honoured and important unit in national economy and every facility was given to him but without prejudice to national interests. The state was not only

यानं वस्त्रमलङ्कारान् रत्नानि विविधानि च ।
हरेयुः सहस्रापापा यदि राजा न पालयेत् ॥
न योनिदोषो वर्तते न कृषिर्न वणिक्पथः ।
मज्जेद् धर्मस्त्रयी न स्योद् यदि राजा न पालयेत् ॥
न वृषाः सम्प्रवर्तन् मध्येरंश्च गर्गराः ।
घोषाः प्रणाशं गच्छेयुर्द्वि राजा न पालयेत् ॥
न यज्ञाः सम्प्रवर्तयुर्विधिवत् स्वाप्तदक्षिणाः ।
न विवाहाः समाजो वा यदि राजा न पालयेत् ॥
वार्तामूलो ह्ययं लोकस्त्रय्या वं धार्यते सदा ।
तत् सर्वं वर्तते सम्यग् यदा रक्षति भूमिपः ॥
यदा राजा धरं श्रेष्ठामादाय वहति प्रजाः ।
महता बलयोगेन तदा लोकः प्रसीदति ॥

(म० शान्तिपर्व अ० ६८।१५-३६)

तस्मात् कोरव्य धर्मेण प्रजाः पालय नीतिमान् ।
एवंवृत्तः प्रजा रक्षन् स्वर्गं जेतासि दुर्जयम् ॥

(म० शान्तिपर्व अ० ६९।१०५)

- (१) श्रोतुं चैव न्यसेद् राजा प्राज्ञान् सर्वार्थं वंशिनः ।
व्यवहारेषु सततं तत्र राज्यं प्रतिष्ठितम् ॥
आकरे लब्धे शूलके तरे नागबले तथा ।
न्यसेदसास्यान् नृपतिः स्वाप्तान् वा पुत्रान् हितान् ॥

(म० शान्तिपर्व अ० ६९।२८-२९)

to offer active help to trade and industry but also to protect the population against profiteering, if merchant princes tried to corner the market and raise prices. The government was to control vices of the community by appointing its own officers to supervise wine-booths, gambling houses and prostitute centres¹. The State, at times, owned large industries which were worked by State Departments. Thus it had extensive economic functions and it even took to activities for the well-being of the people. There were definite and detailed regulations for governing the mode of levying taxes and of realising state dues as well as for the process of collection of revenue. Industries were protected not by any artificial 'Fiscal Policy' but by carefully drawn up regulations. From Kautilya's Arthashastra we learn that the State had a monopoly in the manufacture of Salt². The exploitation of mines was not an exclusive monopoly of the State.

Individual capitalist was allowed to work out mines of certain kinds under leases of the government. The State policy was to encourage decentralisation in the departments, to check fraudulent practices by punishing merchants selling adulterated goods and using unauthorised weights and measures³.

The Government stepped in to provide those works of Public Utility for which State enterprise was more effective

- (१) राज्ञः स्वधर्मं स्वर्गीयं प्रजा धर्मेण रक्षितुः ।
 अरिस्तुर्वा क्षेप्तुर्वा मिथ्यादण्डमतोऽन्यथा ॥
 संस्थया धर्मशास्त्रेण शास्त्रं वा व्यवहारिकम् ।
 यस्मिन्नर्थे विरुध्येत धर्मोऽर्थं विनिर्णयेत् ॥ (की० ३।१)
 सुराध्यक्षः सुराकिण्वव्यवहारान्दुर्गजनपदे स्कन्धावारे वा
 तज्ज्जातसुराकिण्वव्यवहारिभिः कारयेत् ॥ (की० २।२५)
 क्षूताध्यक्षो क्षूतमेकमुखं कारयेत् ॥ अन्यत्र द्वाध्यक्षो
 दण्डो गूढाजीविनापनार्थम् ॥ (की० ३।२०)
 गणिकाध्यक्षो गणिकान्वयामगणिकान्वयां वा रूपयौवनशिल्प-
 संपन्नां स्त्रेण गणिकां कारयेत् ॥ (की० २।२७)
 (२) खन्यध्यक्षः शङ्खं वज्रमणिमुक्तां प्रवालक्षारकर्मान्तां कारयेत् ॥
 पणनव्यवहारं च ॥ लवणाध्यक्षः पाकमुक्तं लवणाभां
 प्रकयं च यथाकालं संगृहणीयात् ॥ विक्रयाच्च मूल्यं रूपं
 व्याजीम् ॥ (की० २।१२)
 (३) सारभाण्डारमित्यसारभाण्डं तज्ज्जातमित्य तज्ज्जातं
 राधायुक्तमपुधियुक्तं समुद्रपरिवर्तितं वा विक्रयाधानं
 नयतो हीनमूल्यं चतुष्पन्चाशत्पणो दण्डः ॥
 बंदेहकानां वा संभूय पण्यमाह्वयतम्
 नर्षेण विक्रीणतां वा सहस्रं दण्डः ॥ (की० ४।२)

than private efforts. The establishment and maintenance of highways and canals, dams and bridges was a special charge of the State. The Mauryan State recognised its responsibility to the destitute and diseased. It offered doles to the orphans, the aged and the infirm and also to poor women in the family way. The government guarded the health of the citizen by penalising adulteration of grains, oils, salts and medicines and it took adequate measures against epidemics. For fighting against national calamities like famines and floods, special staff was maintained and special measures were taken.¹ The administrative system was itself moulded by the needs of agriculture. The welfare of a village was promoted by the employment of appropriate administrative staff on salaries mainly counted in kind. The Superintendent or director of agriculture was in charge of the cultivation of Government Farms. The government in ancient and Mauryan India of Kautilya's time assumed full responsibility for the promotion of agriculture and forestry in all forms and aspects. There was no place in a model village for any thing which could be harmful to its economic and moral welfare. The government also organised voluntary contributions of labour towards communal undertakings. The supply of seeds, cattle and cash for cultivation to those who colonised waste lands was recognised as the duty of the State.² We thus obtain a picture of a welfare state which rendered each village as a centre of life and light under its own institutions of self-government.

(१) (अ) सहोदकमाहार्योदकं वा सेतुं बन्धयेत् ॥

(को० २।१)

(ब) घान्यस्नेह क्षारलवणगन्धर्भञ्ज्य द्रव्याणां समवर्णो-
पधाने द्वादशपणो दण्डः ॥

(को० ४।२)

द्वैवान्यष्टौ महाभयानि ॥ अग्निरुदकं व्याधिदुर्भिक्षं
मूषिका व्यालाः सर्पा रक्षांसोति ॥ तेभ्यो जनपदं
रक्षेत् ॥ ग्रीष्मे बहिरधिभयणं ग्रामाः कुर्युः ॥
दुर्भिक्षे राजा बीजभक्तोपग्रहं कृत्वानुग्रहं कुर्यात् ॥

(को० ४।३)

(२) संभूय सेतुबन्धादपक्रामतः कर्मकरबलीवर्षाः कर्म कुर्युः ।
अकृषन्तोऽपह्रीनं दद्युः ॥ घान्यपशुहिरण्यद्वन्द्वानानु-
गृह्णीयात्सान्यनसुखेन दद्युः ॥

(को० २।१)

घान्यपशुहिरण्यादि निविशमानाय दद्यात् ॥

(को० ५।२)

The state prohibited such sports and amusements as had a baneful influence upon the workers and diminished their efficiency.¹

The State encouraged individual enterprise in various industries and it was not the intention of the government to come in competition with private enterprise.

This survey of functions of the State in ancient India brings to our mind an admixture of both the Physiocratic and Mercantilistic doctrines as well as a picture of Mixed Economy which our National Government has tried to follow. In the terrifying crisis of the two world-wars, the old style of Laissez-Faire of Adam Smith has broken down. The world governments have to undertake wholly a new role. A great variety of specific agencies has to be created to make this role effective and a mighty process of experimental readjustment has to be carried through. This is the need of the times before the world and so before India.



(१) न च तत्रारामविहारार्थाः शालाः स्युः ॥
 नटनर्तनगायनवाद्यकवाग्जीवनकुशीलवा वा न कर्मविघ्नं कुर्युः ।
 निराश्रयत्वाद्ग्रामाणां क्षत्राभिरतत्वाच्च पुरुषाणां
 कोशविष्टिद्वयं धान्यरसवृद्धिर्भवतीति ॥ (की० २।१)

CHAPTER IV

AGRICULTURE AND LAND POLICY

अक्षर्मादीव्यः कृषिमित्कृषस्व वित्ते रमस्व बहु मग्यमानः ।
तत्र गावः कितव तत्र जाया तन्मे वि चष्टे सवितायमयः ॥

(ऋ० १०।३४।१३)

अन्नपतेऽन्नस्य नो वेह्यनमीवस्य शुष्मिणः ।

प्र प्र दातारं तारिष ऊर्जं नो धेहि द्विपदे चतुष्पदे ॥ (यजु० ११।८३)

‘सुसस्याः कृषीकृषि’

(यजु० ४।१०)

नो राजा निकृषि तनोतु ।

(अथर्व० ३।१२।४)

प्रजापतये काश्यपाय देवाय च नमः सवा ।

सीता मे ऋध्यतां देवी बीजेषु च धनेषु च ॥ (कौ० २।२४।३७)

Role of Agriculture

The story of agriculture is, in fact, the story of human civilisation and the invention of grain agriculture should be regarded as one of the most important events in human history. Agriculture formed an important part of Vedic economy. The main industry of ancient Aryans was agriculture and there are frequent allusions to it in the Rig, Yaju and Atharva-Veda as quoted above. Both the Ramayan and the Mahabharat fully recognise the role of agriculture in the concept of National Economy.¹ In ancient Greek society also all occupations except agriculture were considered menial. Xenophon laid great emphasis on agriculture, considering it the mother of all wealth. Shukra and Kautilya assigned the place of pride to agriculture in the pursuit of occupations by the people of this country.²

Although India has marched ahead industrially and is regarded as one of the industrially advanced countries of the East, yet agriculture is still regarded as the pivot of our economy. The shortage of food and raw materials is at present

(१) न नः स समितिं गच्छेद् यश्च नो निर्वपेत्कृषिम् ॥

(म० उद्योगपर्व ३६।१३ पूना सं०)

(गीता प्रेस गोरखपुर द्वारा प्रकाशित महाभारत मे पाठ—‘यश्च नो निर्वपेत् पितृन्’ है)

(२) कृषिस्तु शोभता वृत्तिः या सरिमातृका मता ।

मध्यमावस्थेय वृत्तिश्च शूद्रवृत्तिस्तु चाधमा ॥

(शु० नी० ३।२६४)

the weakest point in the country's economy and the slightest slackening in the agricultural production is likely to be fatal to planning in our country. Measures to increase agricultural production have, therefore, been assigned the central place in the Five Year Plans. As each year passes, the growth of population makes more difficult the task of producing enough food to meet the country's needs.

Deficiencies exist in Cereal food as well as in other types of food and hence the problem of increasing agricultural production has to be approached from several directions.

Classification of Soil And Suitability of Seeds

As agriculture is the science and art of raising plant life from the soil for the use of humanity, a study of the classification of soils and suitability of seeds is very essential. The importance of food derived from land as given in the Rig Veda clearly indicates that the Rig Vedic Aryans produced varied quality foodgrains. Agriculture was not the concern of less intelligent members of the family, but of those youngmen who considered it a dignified occupation and knew clear classification of soil and seed. The Rig-Veda classifies the soil into three-‘Artana’ (unfertile), ‘Apnaswati’ (fertile) and ‘Urvara’ (very fertile) for purposes of cultivation¹. It also gives an idea of the measurement of fields. The Rig-Veda emphasises the quality of good seed and so does Manu.² A dialogue between Yudhishtra and Yaksha, in the Van-Parva of the Mahabharat, throws light on the

- (१) सहि शर्षो न माहृतं तुविश्वणिरप्नस्वतोष्वरास्विष्टनिरातं नास्विष्टनिः ।
आवद्धव्यान्यादविद्यंनस्य केतुरहंणा । अध स्मास्य हर्षतो हृषीवतो विद्वे जुषन्त पन्थां
नरः शुभे न पन्थाम् ॥ (ऋ० १।१२७।६)

ययास्वं भूमिषु च स्यत्याश्चानूपाश्चोषधीः स्थापयेत् ॥ (कौ० २।२४)

- (२) वपन्तो बीजमिव धान्याकृतः पृञ्चन्ति सोमं न मिनन्ति बप्सतः ॥
(ऋ० १०।९४।१३)

सुबीजं चैव सूक्ष्मे जातं संपद्यते यथा ।

तथाऽऽर्षाज्जात आर्यायां सर्वं संस्कारमहंति ॥

बीजमेके प्रशंसन्ति क्षेत्रमन्ये मनीषिणः ।

बीजक्षेत्रे तथैवान्ये तत्रैवं तु व्यवस्थितिः ॥

अक्षेत्रे बीजमसृष्टमन्तरं विनश्यति ।

अबीजकमपि क्षेत्रं केवलं स्थण्डिलं भवेत् ॥

यस्माद्बीजप्रभावेण तिर्यग्जा ऋषयोऽभवन् ।

पूजिताश्च प्रशस्ताश्च तस्माद्बीजं प्रशस्यते ॥ (मन० १०।६९-७२)

importance of good seeds for sowing¹. Kautalya has, in his Artha-shastra, pointed out that the superintendent of agriculture was to collect in time seeds of all kinds of grains, flowers, fruits, vegetables, roots, fibre-producing plants and Cotton. The seeds of grains were to be exposed to mist and heat for seven nights; the seeds of Kosi were treated similarly for three nights; the seeds of sugar-cane and the like were plastered at the cut end with the mixture of honey, clarified butter, the fat of hogs and cow-dung; the seeds of bulbous roots with honey and clarified butter and cotton seeds with cow-dung². Very few people know that our country spends some thing like rupees fifty crores a year for importing superior cotton from Egypt, U. S. A. and East Africa. This is indeed a serious drain on the country's foreign exchange resources. A genuine effort can be made to increase indigenous production of superior cotton by improved seeds and fertilizers, besides giving better irrigational facilities and the control of cotton pests. A successful effort in this direction would result in the saving of valuable foreign exchange for our country. It is for agricultural experts and others connected with the 'Grow-more-food' campaign in the country to ponder over the suggestions of Kautalya for the preparation of seeds and benefit thereby for national interests.

Agricultural Technique And Systematised Farming Operations

Authorities on the history of agriculture generally believe that human beings first started making use of fruits and roots in their daily life out of forced necessity. Agriculture seems to have made real headway at a later stage. The operation of tilling the soil, in the Rig-Vedic age, meant the cutting of furrows in the field with the wooden plough drawn by bulls, the sowing of seeds in the furrows thus made, the cutting of corn with the sickle, the laying of the bundles of corn on the thrashing floor, thrashing and finally sifting and winnowing. The Shatpath Brahman

(१) किंस्विदावपतां श्रेष्ठं किंस्विन्निवपतां वरम् ।

वर्षमावपतां श्रेष्ठं बीजं निवपतां वरम् ॥

अग्निहिमस्य भंषज्यं भूमिरावपनं महत् । (म० धनपर्व अ० ३१३)

(२) सोताध्यक्षः कृषितन्त्रशुल्बवृक्षापूर्वदक्षस्तज्ज्ञसखो वा सर्वधान्यं
पुष्पफलशककन्दमूलवाल्लिक्यक्षीमकार्पसबीजानि यथाकालं गृह्णीयात् ॥

तुषारपायनमुष्णशोषणं चासप्तरात्रादिति धान्यबीजानां त्रिरात्रं पञ्चरात्रं वा
कोशीधान्यानां मधुघृतसूकरवसाभिः शकृद्यवताभिः कांडबीजानां छेदलेपो मधुघृतेन
कन्धानाम् अस्थिबीजानां शकृदालेपः, शास्त्रिणां गतंदाहो गोस्थिशकृद्भिः काले
बीजं च ॥

(की० २।२४)

also refers to a similar process in the system of farming—ploughing, sowing, reaping and thrashing¹. The Atharva Veda gives the credit of introducing the art of ploughing to Prithi-Vainya², but ploughing is constantly referred to in the Vedic literature. Vedic Aryans were not merely pastoral, but they knew the importance of arable farming and greatly valued mixed farming.

Different Vedic hymns give us the picture of a well-settled rural economy in which agriculture, carried on with the plough and bullocks, played an important part. The plough is described as having a smooth handle, well laid and lance pointed. There was a special name-‘Kinas’ for the ploughman or cultivator of the soil who is now popularly known as ‘Kisan’ in the rural areas of the country³. There are several references in Vedic literature to various types of ploughs which were drawn by six, eight or even twelve bullocks. In the Shukra Niti also a reference is made to a plough which was drawn by sixteen bullocks⁴. Such ploughs, most probably, must have been effective as a modern tractor for purposes of deep ploughing. Dr. V. S. Agarwal has pointed out in his book ‘India as known to Panini’ that a large plough was called ‘Hali’ which was also known as ‘Jitya’ perhaps from its utility to break even the hardest ground and to reclaim waste land. It has also been pointed out that farmers were classified on the ground of possessing no plough of their own ‘Ahalī’; having a good plough

(१) कृषन्निष्काल आशितं कृणोति यन्नघ्वानमप वृद्धन्ते चरित्रः।

(ऋ० १०।१.७।७)

शूनं नः काला विकृषन्तु भूमिं शूनं कीनाशा अभि यन्तु बाह्वः।

(ऋ० ४।५७)

कृषन्तो ह स्मैव पूर्वो-वपन्तो यन्ति लूनन्तो अपरे मणवन्तः।

(श० ब्रा० १।६।१।३)

(२) तां पृथी वन्योऽथोक तां कृषिं च सस्यं चाऽथोक।

ते कृषिं च सस्यं च मनुष्या उपजीवन्ति ॥ (अथर्व० ८।१०।४)

(३) शूनं बाहाः शूनं नरः शूनं कृषतु लांगलम्।

शूनं वरत्रा बध्यन्तां शूनमष्टामुदिगय ॥ (ऋ० ४।५७)

शूनं सुकाला वि तुन्वन्तु भूमिं शूनं कीनाशा अनुमन्तु बाह्वान्।

शूनासीरा हविषा तीक्ष्मना सुपिप्पला ओषधीः कर्तमस्मै ॥

(अथर्व० ३।१७)

(४) षड्योगं सीरं—आहुः (अथर्व० ८।१।१६)

सीरं युनक्ति षडगवं भवति । (श० ब्रा० १३।८।२६)

सीरभवेः कृषिः प्रोक्तमन्वाद्यं ब्रह्मिणाविषु।

ब्राह्मणं षोडशगवं चतुर्दशयथापरः ॥ (शु० नी० ४।२६०)

'Suhali' and having a bad plough 'Durhali'¹. Several other agricultural implements are mentioned in the Vedic literature. Kautalya has referred to 'Karshanyantra' (most probably the plough) and to other instruments of agriculture².

The Vedic hymns give us a picture of systematised agricultural operations. There were rites for putting oxen to the plough, for sowing and for honouring Sita or the goddess of agriculture. There was a sacrifice offered to 'kshetrapati' or the lord of the field³. Agrayana sacrifice was a religious ceremony for partaking in the first fruits of the harvest. Deep ploughing is referred to in Vedic hymns and Kautalya, in his Arthashastra, has pointed out the possibilities of a good harvest where systematic rainfall rendered three turns of ploughing possible⁴. He has given indications for time and method of sowing different kinds of seeds. Careful ploughing, timely sowing and increasing fertility of the soil were a characteristic feature of ancient Indian Agriculture⁵. According to Kautalya, crops were to be collected as soon as they were ripe. No wise man was to leave any thing in the fields not even chaff. Crops when reaped were to be heaped up in high piles or in the form of turrets. The piles of crops were not to be kept close to each other nor were their tops to be low. The thrashing floors of different

(1) India as known to Panini,—Dr. V. S. Agarwal.

(२) अगस्त्यः क्षनमानः क्षनित्रैः प्रजामपत्यं बलमिच्छमानः ।
उभौ वर्णावृषिर्यः पुषोष सत्या देवेष्वाशिषो जगाम । (ऋ० १।१७९।६)
सीताध्यक्षः कर्षणयन्त्रोपकरणबलीवर्द्धं च वामसङ्गं कारयेत् ॥
(की० २।२४)

(३) यूनक्त सीरा वि युगा तनुध्वं कृते योनौ वपतेह बीजम् ।
गिरा च भृष्टिः सभरा असन्नो नवीय इत्सुष्यः पक्कमेयात् ॥
सीरा युञ्जन्ति कवयो युगा वि तन्वते पृथक् ।
बीरा देवेषु सुप्नया ॥
(ऋ० १०।१०।३-४)

(४) अर्वाची सुभगे भव सीते वन्दामहे त्वा ।
यथा नः सुभगाससि यथा नः सुफलाससि ॥
क्षेत्रस्य पते मधुमन्तममिं धेनुरिव पयो अस्मासु षड्व ।
मधुश्चतं घृतमिव सुपूतमृतस्य नः पतयो मूलयन्तु ॥
मधुमतीरोषबीद्यावि आपो मधुमन्नो भवत्वन्तरिक्षम् ।
क्षेत्रस्य पतिर्मधुमाज्ञो अस्वरिष्यन्तो अन्वेनं चरेम ॥ (ऋ० ४।५७)
वातमातपयोगं च विभज्यन्त्र वषन्ति ।
त्रोन्करावांश्चजनयन्तत्र सस्यागमो ध्रुवः ॥ (की० २।२४।१४)

(५) ततः प्रभूतोदकमल्पोदकं वा सस्यं वापयेत् ॥ शालिबीहि कोद्वतिलप्रियङ्गु,
दारुवराकाः पूर्ववापाः ॥ ययर्तुवशेन वा बाजीवापाः । सर्वबीजानां तु प्रथमवापे
सुवर्णोदकसंस्लृतां पूर्वमुष्टिं वापयेदमुं च मन्त्रं ब्रूयात् । (की० २।२४)

fields were to be kept close to each other. Workmen in the fields were always allowed to have water with them but no fire¹.

Chief Crops

Different types of Crops and their rotation were known to the Vedic Aryans. The food crops often mentioned and prayed for in the Rig Veda were barley and rice which are even to-day regarded as auspicious on ceremonial occasions. Barley has a place in Hindu rituals and rice is still the chief food of majority of Indians. Wheat is not mentioned in Rig Veda, but in the Yajur Veda it is mentioned together with other Cereals². The Mahabharat gives an idea of the cultivation of both barley and wheat together³.

Kautalya has referred to the succession of crops from season to season and has pointed out the hardships of raising summer crops. According to Kautalya, the superintendent of agriculture was to grow wet crops, winter crops or summer crops according to the supply of workmen and water. He believed that the rice crops and the like were the best to grow; vegetables of intermediate nature and sugar-cane crops were the worst, because they were subject to various evils and required much care and expenditure to reap. He was also of the view that lands near the banks of rivers were suitable for growing pumpkin and the like; lands which were frequently overflowed by water were suitable for long pepper, grapes and sugarcane; the vicinity of wells for vegetables and roots; low grounds for green crops and marginal furrows were suitable for the plantation of fragrant plants, medicinal herbs. Such medicinal herbs as grow in marshy grounds were to be grown not only in grounds suitable for

(१) यथाकालं च सस्यादि जातं जातं प्रवेशयेत् ।
न क्षेत्रे स्थापयोत्किंचित्पलालमपि पण्डितः ॥
प्रकराणां समुच्छायान्वलभीर्वा तथाविधाः ।
न संहितानिकुर्वीत न तुच्छागो शिरांसि च ॥
खलस्य प्रकरान्कुर्यान्मण्डलान्ते शमाधितान् ।
अनग्निकाः सोढकाश्च खले स्युः परिकर्मिणः ॥ (को० २/२४)

(२) ब्रीह्यश्च मे यवाश्च मे माषाश्च मे तिलाश्च मे मुद्गाश्च मे खल्वाश्च मे प्रियंगवश्च
मेऽणवश्च मे श्यामाकाश्च मे नीबाराश्च मे गोधूमाश्च मे मसूराश्च मे यज्ञेन
कल्पन्ताम् ॥ (यजु० १८/१२)

(३) ये यवास्त्रा जनपदा गोधूमस्त्रास्तथैव च ।
तान् देशान् संश्रयिष्यन्ति युगान्ते पर्युपस्थिते ॥ (म० वनपर्व)

them, but also in pots¹. There was provision to guard against effectively the common pests of crops namely locusts, rats, wild beasts and other crop damaging insects.

Means Of Irrigation

Farming is an operation vitally connected with mother earth and farmers in Vedic days naturally attached great religious significance to actual sowing of seeds and timely watering of fields. As the bulk of population consisted of actual cultivators, irrigation was a subject of great importance. There are hymns for rain-god and other sky deities to grant good rainfall and thus prosperous agriculture². The Mahabharat illustrates the importance of Sun-god in causing rainfall and making agriculture prosperous for mankind. Sage Dhomya advised Yudhis-tra to pray to Sun-god to get food for the party accompanying him in the forests³.

Rainfall

Indian agriculture has been called a gamble in the rains because of the uncertainty and irregularity of the monsoon. With the failure of the monsoon, there is a lock-out in the agricultural industry. Kautalya has given an idea of the quantity of rainfall obtained in different parts of the country to suit

(१) कर्मोदकप्रमाणेनकेदारं ह्रमनं ग्रंथिकं वा सस्यंस्थापयेत् ॥ शाल्यादि ज्येष्ठम् ॥
षण्डो मध्यमः ॥ इक्षुः प्रत्यवरः ॥ इक्षवो हि बहुवाबाधा व्ययप्राप्तिनाश्च ॥
फेनाघातो बल्लीफलानां परोवाहागताः मृदुकेक्षणां कृपपर्यन्ताः शाकमूलानां
हरिणपर्यन्तः हरितकानां पाल्योलवानां गन्धभैषज्योशीरहोबरपिण्डालकादीनाम् ॥
यथास्वं भूमिषु च स्थल्याश्चानूप्याश्चोषधीः स्थापयेत् ॥ (कौ० २।२४)

(२) शुनं पर्जन्यो मधुना पयोभिः शुनासीराशुनमस्मासु धत्तम् ॥ (ऋ० ४।५७)
निकामे-निकामे नः पर्जन्यो बर्षतु फलवत्यो । (यजु० २२।२२)

(३) पुरा सृष्टानि भूतानि पीडयन्ते क्षुधया भूशम् ।
ततोऽनुकम्पया तेषां सविता स्वर्पिता यथा ॥
गत्वोत्तरायणं तंजो रसानुद्धृत्य रश्मिभिः ।
दक्षिणायनमावृत्तो महीं निविशते रविः ॥
क्षेत्रभूते ततस्तस्मिन्नोषधीरोषधीपतिः ।
दिवस्तेजः समुद्धृत्य जनयामास वारिणा ॥
निषिञ्चतश्चतस्रोऽजोभिः त्वयोनो निर्गते रविः ।
ओषध्यः षड्रसा मेघ्यास्तदन्नं प्राणिनां भुवि ॥
एवं भानुमयं ह्यन्नंभूतानां प्राणधारणम् ।
पितृषु सर्वभूतानां तस्मात् तं शरणं ब्रज ॥ (म० धनपर्व अ० ३)

different crops¹. He has also discussed the idea of even distribution of rainfall by pointing out that one-third of the requisite quantity of rain should fall both during the commencement and closing months of the rainy season and two-thirds in the middle. Kautilya believed that a forecast of such rainfall could be made by observing the position and motion of Jupiter, the rise, set and motion of Venus and the natural or unnatural aspect of the Sun². He has also pointed out that from the position of the Sun, sprouting of seeds can be inferred; from the position of the Jupiter, the formation of the grains can be inferred. Kautilya, it appears, was conscious of optimum rainfall because he believed that rainfall thrice a week was good and further there should be eighty showers throughout the whole rainy season. An ideal rainfall was that which was intermingled with sixty sunny days during the whole period of the rainy season³. Modern meteorologists can profitably take a lesson from these observations of Kautilya and guide agricultural operations for better yields in our country.

Rivers

Besides rainfall, rivers must have been another natural source of irrigation in ancient India as they are to-day. River valley projects like those of the modern days are not discussed clearly in the ancient literature. The Rig Veda, in tenth mandal sukta 75, contains names of several rivers including the Ganga, the Yamuna and Sarswati⁴. According to Manusmriti, the land between the rivers Sarswati and Dwashadvati was called 'Brahmavarta' and was regarded as an ideal part of the country⁵. In the Tirthayatra Parva of the Mahabharat practically all the

- (१) षोडशरोणंजाङ्गलानां वर्षप्रमाणमध्यर्धमानूपानाम् ॥ देश
वापानामर्धत्रयोवशाश्मकानां त्रयोविंशतिसन्तीनानाममितमपराःतानां
हंसन्यानां च कुल्यावापानां च कालतः ॥ (की० २।२४)
- (२) वर्षात्रिभागः पूर्वपश्चिममासयोर्द्वौत्रिभागे मध्यमयोः सुषमारुपम् ।
तस्योपलब्धिर्बृहस्पतेः स्थानगमनगर्भाधानेभ्यः शृङ्गोदयास्तमयचारेभ्यः
सूर्यस्य प्रकृतिविकृताश्च ॥ (की० २।२४)
- (३) सूर्याद्विजसिद्धिः ॥ बृहस्पतेः सस्यानां स्तम्बकरिता ॥ शृङ्गाद्विष्टिरिति ॥
त्रयः साप्ताहिका मेघा अशीतिः कणशोकराः । षष्टिरातपमेघानामेघा
द्विष्टिः समाहिता ॥ (की० २।२४)
- (४) इमं मे गङ्गे यमुने सरस्वति शुतुद्रि स्मोमं सचता परुष्या ।
असिक्न्या मरुद्धं वितस्तयार्जोकोये शृणूह्या सुषोमया ॥
(ऋ१०।७५।५)
- (५) सरस्वतीदृषद्वत्योर्द्वेनद्योर्दन्तरम् ।
तं देवनिर्मितं देशं ब्रह्मावर्तं प्रचक्षते । (मनु० २।१७)

rivers of the country have been mentioned, but the Ganga and the part of the country through which it flows was regarded as the best.¹ Even to-day the Ganga-Yamuna Dwava is the most fertile and agriculturally advanced part of the country, which must have been so in the Vedic period as well as in the period of the Epics.

Canals

The Vedic Aryans, it appears, did not depend merely on rainfall for purposes of irrigation, because some hymns refer to artificial water channels which must have been used for purposes of irrigation.²

Wells and Tanks

Handicaps of agriculture in ancient India were fully realised and adequate attempts were made to do the needful. Wells, tanks, reservoirs and larger irrigation works were enjoined as a public duty from which no king, no ruler could obtain exemption. In the Sabha Parva of the Mahabharat, sage Narad questioned Yudhishtra to know whether agriculture was merely dependent on rainfall or big tanks full of water had been constructed in different parts of his kingdom³. Kautalya

(१) यत्र सा गोमती पुण्या रम्या देवर्षिसेविता ।

महानदी च तत्रैव तथा गयशिरो नृप ॥

गङ्गा यत्र नदी पुण्या यस्यास्तीरे भगीरथः ।

बाहुदा च नदी यत्र नन्दा च गिरिर्मूर्धनि ।

यत्र गङ्गा महाराज स देशस्तत् तपोवनम् ।

सिद्धिक्षेत्रं च तज्ज्ञेयं गङ्गातीरसमाश्रितम् ॥

(म० तीर्थयात्रा पर्व अ० ८५)

(२) या आपो विव्या उत वा त्वन्ति खनित्रमा उतवा याः स्वयंजा ।

समुद्धार्या या शुचयः पावकास्ता आपो देवीरिह मामवन्तु ।

(ऋ० ७।४९।२)

शं न आपो धन्वन्या शम् सन्त्वनप्याः ।

शं न खनित्रमा आपः शम् या कुंभ आभूताः शिवाः नः सन्तु वार्षिकी ।।

(अथर्व० १।६।४)

(३) निराहावान्कणोत्तनं सं वरत्रा वधातन ।

सिन्ध्वामहा अवतमुद्रिणं वयं सुषेकमनुपक्षितम् ।।

इष्कृताहावमवतं सुवरत्रं सुषेचनम् ।

उद्रिणं सिन्धे अक्षितम् ।।

(ऋ० १०।१०।१।५-६)

कच्चिद् राष्ट्रे तडागानि पूर्णानि च बहून्ति च ।

भागशो विनिविष्टानि न कृषिर्ब्रह्मात्मा ।।

(म० सभापर्व अ० ५)

and Shukracharya have also expressed their views in this connection¹.

Methods of Manuring

It is generally believed that the fertility of agricultural land in India has been steadily going down on account of the absence of proper manuring. Careless and continued cropping for generations together without adequate manuring has impoverished the soil of its nutrients. The various types of manures which can be successfully used these days in our country are animal waste, human waste, oilseed-cakes, green manures and chemical fertilisers. Whatever may be the comparative utility of these different types of manures, but the Vedas give an indication for the use of cow-dung as the best organic manure for fertility of the soil². Kautilya the great master of details has discussed various types of manures including cow-dung, bone, fish and a sort of vegetable milk³. Practical application of manures obtained from fertiliser factories like the Sindri has shown that cow-dung manure is superior to these chemical manures for maintaining and increasing the fertility of the soil in the long run. Scarcity of fuel in the rural areas compels the Indian cultivators to use cow-dung as fuel. If the afforestation schemes launched by the government can result in sufficient supply of fuel for the vast majority of the population in the country side, it may be possible to conserve cow-dung for manuring needs of Indian agriculture. This process of turning our cow-dung into manure is likely to prove most beneficial to the interest of cultivating classes in our country.

State in Relation to Agriculture

The Physiocratic leader, Quesney was fully justified when he remarked, "poor peasant, poor king, poor country". In a

(१) सहोदकामाहार्योदकं वा सेतुं बन्धयेत् ।। (कौ० २।१।२२)

तडागं वापिकाकूपमातृकाद्वयमातृकात् ।

वेशान्नबोमातृकात्तुराजानुक्रमतः सदा ।।

(शु० नी० ४।२२५)

(२) श्रोणामेक उदकं गामवाजति मांसमेकः पिशति सूनयाभूतम् ।

आ नि स्रुचः शकुवेको अपाभरत्किं स्वित्पुत्रस्यः पितरा उपावत्तुः ।।

(ऋ० १।१६।१०)

अस्मिन् गोष्ठे करोषिणी ।

शिशो वो गोष्ठो भवत् शारिशाकेवपुष्यत् ।

(अथर्व० ३।१४।३-५)

(३) अस्थि प्रवृद्धाश्चाशुष्ककटुमत्स्याश्च स्नुहिक्वोरेण वापयेत् ।।

(कौ० २।२४)

predominantly agricultural country like India where the cultivators are poor and backward in all respects, the responsibility for the development of agriculture lies mostly on the state. In ancient times, monarchs protected and helped agriculture by adopting a sound policy. The coronation hymn in the Yujur Veda places a responsibility on the king to develop agriculture of the country. From the Sabha Parva of the Mahabharat we gather that the king was expected to supply seed and cheap loans to the cultivators.¹ Panini has given indication of crop-loans. According to Kautilya, the king was to construct reservoirs of water and to supply necessary help to those who constructed reservoirs of their own accord. Proper marketing facilities, seed, cattle, implements and manure needed by the cultivators were provided by the state. The concept of a welfare state in ancient India has already been discussed in the previous chapter; agriculture as the most important industry claimed its fair share of attention on the part of the state in such a concept. Needs of agriculture were planned, pursued and the administrative system was adjusted to the needs of agriculture.

The king undoubtedly took a certain share out of the agricultural produce for the services rendered by him to the cultivating classes. According to Kautilya, those who cultivated irrigating by manual labour were to pay $\frac{1}{3}$ of the produce and those who cultivated irrigating by water lifts were to pay $\frac{1}{3}$ of the produce². A detailed discussion of the king's share in the agricultural produce would be found in a separate chapter on taxation. India's future prosperity depends to some extent on the development of industries, but there is good reason to believe that it can be achieved more surely by the application of greater skill, knowledge and capital first to agriculture. It is against this background that the present position and the future possibilities of agriculture have to be considered. Agriculture is still the livelihood of about seventy percent of the population. It is backward, and the reasons for its being so are soil erosion, excess or scarcity of water, the general

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- (१) कच्चिन्न भक्तं बीजं च कर्षकस्यावसीदति ।
 प्रत्येकं च शतं वृद्ध्या ददास्युणमनुग्रहम् ॥
 कच्चिन्न चौरलब्धेष्वं कामारः स्त्रीबलेन वा ।
 त्वया वा पीड्यते राष्ट्रं कच्चित् तुष्टाः कर्षीबलाः ॥
 (म० सभापर्व ७० ५)

- (२) स्वसेतुभ्यः हस्तप्रावर्तिममूदकभागं पञ्चमं दद्युः । स्कन्धप्रावर्तिमंचतुर्थम् ॥
 स्रातोयन्त्रप्रावर्तिमं च तृतीयम् ॥ चतुर्थं नदीसरस्तटाककूपोद्घाटम् ।
 (को० २।२४)

poverty of certain soils, infestation of weeds, a shortage of right types of manures, good seeds and the absence of an organisation to bring scientific farming within easy reach of poor and ignorant cultivators.

Our national government have given up the policy of apathy towards agriculture and have adopted a sound, vigorous policy for reform of land tenure, increase of irrigational facilities, supply of good seed, cattle and credit facilities of different types. All-India as well as state-wise crop competitions have been organised to popularise techniques of agriculture where several awards of 'Krishi Pandits' and 'Krishi Ratna' have been announced including cash prizes. In the scientific agriculture of Western countries, an aspect of agriculture is bound up with the peaceful use of atomic energy. It is well known that an important product of atomic energy is radio isotopes. Radio isotopes are said to have opened up undreamt of possibilities of increased yields. Cobalt isotopes are to be set up for the first time in the country at the Pusa Agricultural Research Institute to intensify research on the application of atomic energy to plant life. A corps of agricultural scientists is being raised at the institute to harness atomic energy in the production of better food grains, foliage and flowers. Work already done at the institute on the application of atomic energy to agriculture has yielded interesting results. New types of plants have been evolved. Valuable work has been done in evolving a variety of wheat which will be completely rust-proof.

All these efforts of the government are commendable, but there are some economic shortcomings such as rural indebtedness, defective land systems and the sub-division and fragmentation of holdings. The small size of holdings and their dispersal over a large area are the biggest handicaps to better farming. The success of tractor ploughing in Russia has led people to think that the unit yield and total production could be increased in India also in the same way. But the fact is that no technological schemes for increased production or better farming can work on the uneconomic holdings of our country. It is only in large holdings that specialised and expensive machinery can be used economically. The mere use of large tractor will not increase production. Large scale methods as practised either in U. S. A. or Russia are not suited to a country like India. As for large scale farming, the mere consolidation of holdings, whether voluntary or compulsory, is not likely to go very far, because experiments in co-operative or collectiv farming show that Indian peasant values highly his right of ownership. The fondness of

some top-ranking leaders of our country for co-operative farming shows their zeal for greater national production, but it has to be borne in mind that Indian conditions and traditions are quite different from those of other countries of the world. In the troubled but dynamic scene of consolidation of holdings and in an approach to co-operative farming, it is essential to make out and evolve a clear-cut land policy for the country.

Ownership of Land

Land in modern economics refers to all the natural resources of a country. It plays a vital part in the economic life of the people and that is why its private, social or state ownership has been of great importance. The first writers on economics either in the East or in the West were concerned with land. They assumed the importance of land as a great factor of production and devoted their attention principally to the question of ownership. Plato in the 'Republic' called for communism in land among the rulers of the State, as a means of removing sources of discontent. Aristotle did not favour communism and advocated private ownership. To him private ownership seemed more likely to elicit the best efforts. Eminent historians of our country believe that the land in the Vedic age was owned by individual families and the proprietorship was vested in the father as head of the family.¹ A passage in the first Mandal of Rig Veda indicates that fields were to be carefully measured from which it follows that individual ownership in land for cultivation was recognised.² The conception of the absolute royal ownership of all land does not seem to have prevailed during the Vedic age. The king had the power to expel anybody from his land, but this power arose not from his ownership of land but from his sovereignty and was recognised only as a royal prerogative. According to a Sloka of Manu as quoted below, it appears that the king was supposed to be the owner of half the treasure buried underground because he was the owner of the land³. The individual

(1) History and Culture of India-Vol. I-Vedic Age (Bhartiya Vidya Bhawan Bombay).

(२) क्षेत्रीमव वि मनुस्ते जनेन एकं पात्रमभवो जेहमानम् ।

उपस्तृता उपमं नाधमाना अमर्त्येषु अव इच्छमानाः ॥ (ऋ० १।११०।५)

(३) निधीनी तु पुराणार्जनां धातूनामेव च क्षिती ।

अर्धभागप्रक्षणाद्वाजा भूमेरधिपतिर्हि स ; (मनु० ८।३९)

ownership of land has undoubtedly been a debatable point and there seems to be considerable difference of opinion as regards the sovereign rights of overlordship in the land. Discussions on the determination of boundaries of fields, wells, tanks and gardens as found in the Smritis of Manu, Yagnavalkya and Narad suggest individual ownership in these means of production.¹ The late Dr. K. P. Jaiswal in his book on ancient Hindu polity takes very emphatically the view that there was no feudal overlordship over land in ancient India. He writes "Some of the writers have confidently asserted that property in the soil, according to the Hindu view, always vested in the Hindu sovereign. The fact on other hand is that this is exactly the reverse of the Hindu theory on the subject. Nothing is so distant from the Hindu law as this theory. Numerous instances of gifts and sales of land by private individuals can be given from the earliest literature. Above all it is expressly and emphatically declared that the king has no property in the soil and this is declared in no less an authority than the very logic of Hindu Law, the Mimamsa. The very discussion of the Mimamsa proves, for it presupposes, the existence of private property in land. Such private property was deemed inviolable. All possible pretensions by the crown to such right was denied in the clearest possible terms. And this was quite in consonance with the spirit of Hindu law which held even the gods subject to law and prescribed punishment for the sovereign, if he was arbitrary²".

Kautalya, in his Arthashastra, has clearly differentiated between crown lands and private lands. He has also discussed the system of 'Batai' i.e. sharing of the agricultural produce between the tiller of the soil and the owner of land. It appears that the popular socialist slogan—land to the tiller of the soil—was recognised by Kautalya when he wrote that lands could be confiscated in case of those who did not cultivate them and given to others for purposes of cultivation. They could be cultivated by village labourers and traders.³ According to

(१) सोमनो विवादे क्षेत्रस्य सामन्ताः स्वविरादयः ।

गोपाः सोमाकृषाणाञ्च सर्वे च वनगोचराः ॥

(याज्ञवल्क्य ० २।१५४)

(2) Hindu Polity..... K. P. Jaiswal.

सोमामध्ये तु जातानां वृक्षाणां क्षेत्रयोर्द्वयोः ।

फलं पशुपं च सामान्य क्षेत्रस्वामिषु निर्दिशेत् ॥

(नारद ० ११।१३)

(३) अकृषतामाच्छिद्यान्धेभ्यः प्रयच्छेत् ॥

ग्रामभृतकबन्धेहका वा कृषेयुः ॥

अकृषन्तोऽपह्नीनं दद्युः ॥

(को ० २।१)

Naradsmriti, the king could not be justified to interfere with the ownership and possession of houses and lands because it could result in utter chaos¹. Mr. H.D. Malaviya, secretary, Economic and Political Research Department of the All-India Congress Committee, New Delhi has expressed the view in his book 'Village Panchayats in India' that in ancient India there was no landlord system, as known in the West, nor was the individual tenant the full owner of his patch of land. The author quotes Maine to the effect that 'no ownership of Indian land was discoverable except that of village Communities subject to the dominion of the state'. But this communal ownership of land did not, however, permit the state to dispossess an individual of the land he owned, it merely restricted his power of its disposal, lest an unwanted or undesirable person, should be admitted to the village community to disturb its peace.

We can, therefore, come to the conclusion that individual ownership of land was recognised in ancient India and a cultivator could only be dispossessed of his property if he failed to pay the king's taxes. The state dealt with the cultivators directly unhampered by middle-men. Land was regarded as private property and handed down from generation to generation, but all land and all property held by an individual was a trust. Individual ownership of land may be regarded more desirable from the point of view of the state, because it is the owner from whom the state has to claim the land revenue. The owner-cultivator must exploit his land with much greater zeal than a tenant who has to share the fruit of his labour with a landlord. Probably it was with this view that soon after independence the national government of the country made Zamindari abolition an important issue which has been peacefully and successfully brought about in several states of the country. Abolition of Zamindari in India became a symbol of socio economic revolution. It is believed that the efforts of Acharya Vinoba Bhave are also contributing towards a better distribution and ownership of landed property. The slogan for the establishment of a Socialistic Pattern of Society is likely to solve better the problem of land ownership in our country. Mahatma Gandhi had also contributed to the development of a socialistic outlook in our country through his writings. He wrote in the Harijan (2-1-37) "Real socialism has been handed down to us by our ancestors who taught—All land belongs to

(१) गृहक्षेत्रे च दे दृष्टे वासहेतुं कुटुम्बिनाम् ।

तस्मात्तेनाक्षिपद्वाजा भूमेरक्षिपतिहि तः ॥

(नारद० ११।४२)

Gopal. Where then is the boundary line? Man is the maker of that line and he can therefore unmake it. Gopal literally means shepherd; it also means God. In modern language it means the state, i.e. the people. That the land to-day does not belong to the people is too true. I have no doubt that we can make as good an approach to it as is possible for any nation, not excluding Russia, and that without violence—Land and all property is his who will work it” . . .

The Report of the Sub-Committee on Land Policy (published in 1948) set up by the National Planning Committee had suggested “that the ownership in all forms of Natural Wealth must belong to and vest absolutely in the people of India collectively. This includes fields, farms or fellow lands, mines, quarries, rivers, natural springs, mountains, sources of mechanical energy or power, forests, whether actually being cultivated, exploited and worked or not; all other forms of natural advantage which can be used to produce new wealth. By their sovereign authority, the people may make laws from time to time to regulate the distribution of any produce from such natural wealth among the citizens and residents of the country. But the ultimate ownership in these must vest absolutely in the people collectively. All profit or surplus from the utilisation of natural wealth must belong to the community collectively to enable it to adjust properly all forms of collective economy”. It may be pointed out here that community projects, consolidation of holdings, co-operative farming and all constructive plans of development would become easy of execution and realisation if a successful land policy is adopted. With the abolition of Zamindari, in certain parts of the country, cultivators have been given permanent heritable and transferable rights in land. If such a process can infuse the cultivating classes with a sense of duty towards the land, the society and the state, it will be a big step towards solving the food problem of the country.

Laws of Inheritance

During Vedic age, the property of the family was the property of the head of the house, usually the father. His sons, when grown up, could claim the property and induce the father to divide it, but this did not amount to the doctrine that every child on birth had a legal share in the property. As regards the division, preference was shown to the eldest son. This preference was shown even in the inheritance of kingdoms during the Epic age. King Dasharatha

decided for Rama's coronation on this ground. Yudhishtra was enthroned because he was the eldest son of Pandu. Detailed rules of inheritance of landed property occur in the Dharma Sutras, but these rules are very vague. Some authorities hold that among sons only the eldest one inherits, while others lay down an equal division among all sons. The whole matter of inheritance is vague and there seems to be no definite opinion regarding it. Manu believed that after the death of parents all sons could share father's property equally, but they had no right to do so in the life time of their parents. According to him, the eldest son could inherit all property of his father if he maintained his younger brothers with fatherly affection. A preference has been shown to the eldest son by Manu. Yagnavalkya held the view that a father could give preference to the eldest son or could divide equally among all his sons. Both Manu and Yagnavalkya support daughter's inheritance to the father's property in case there are no sons'. Kautalya also believed that if a man had no male issue, his own brothers or persons who had been living with him could take possession of his property. Daughters also could inherit the property on certain conditions. Kautalya has concluded the discussion of inheritance by pointing out that partition of inheritance should

(१) ऊष्ट्रं पितृश्च मातृश्च समेत्य भ्रातरः समम् ।

भजेरन् पंक्तिं रिक्थमनीशास्ते हि जीवतोः ॥

ज्येष्ठ एव तुगूहूणीयात्पित्र्यं धनमशेषतः ।

शेषास्तमुपजीवेयुर्यथैव पितरं तथा ॥

ज्येष्ठेन जातमात्रेण पुत्री भवति मानवः ॥

पितृणामनृणाश्चैव स तस्मात् सर्वमर्हति ॥

पितेव पालयेत्पुत्रान्ज्येष्ठो भ्रातृन् यवीयसः ।

पुत्रवच्चापि वर्तरेज्येष्ठे भ्रातरि धर्मतः ॥

यो ज्येष्ठो ज्येष्ठवृत्तिः स्यान्मातेव स पितेव सः ।

अज्येष्ठवृत्तिर्यस्तु स्यात्स संपूज्यस्तु बन्धुवत् ॥ (मनु० ९/१०४-११०)

विभागं चेत्पिता कुर्याद्विच्छया विभजेत्सुताम् ।

ज्येष्ठं वा श्रेष्ठभागं सर्वे वा स्युः समांशिनः ॥

भर्या पितामहोपात्ता निबन्धो द्रव्यमेव च ।

तत्र स्यात्सदृशं स्वाम्यम्पितुः पुत्रस्य चोभयोः ॥ (या० २।११६-१२५)

यथैवात्मा तथा पुत्रः पुत्रेण दुहिता समा ।

तस्यामात्मनि तिष्ठन्स्यां कथमन्धोधनं हरेत् ॥ (मनु० ९।१३०)

पत्नी दुहितरश्चैव पितरौ भ्रातरस्तथा ।

तत्सुता गोत्रजा बन्धुशिष्यसन्नह्यवारिणः ॥ (याज्ञवल्क्य २।१३९)

be made in accordance with the customs prevalent in the country, caste, guild or the village of the inheritors¹.

To sum up, it may be pointed out that the joint family system remained generally the rule in the past. There have been mostly two systems of inheritance amongst the Hindus in India viz. the Dayabhag prevailing in Bengal and the Mitakshara in other parts of India. According to Mitakshara, each son acquires at his birth an equal interest with his father in all ancestral property of paternal line and can seek partition thereof; under the Dayabhag, the sons do not acquire any interest by birth in the ancestral property and their rights arise for the first time after death of the father. The Mitakshara recognises two modes of devolution of property - one by survivorship and the other by succession. The Dayabhag recognises only one mode of devolution viz. that of succession. The latest Hindu succession bill as recommended by the Joint Select Committee of Parliament provided for equal shares for son, daughter, mother and absolute property rights for women. Illegitimate children are also to inherit father's estate according to the bill. It is believed that the bill falls in line with the ancient traditions of the country. In our country, the laws of inheritance to the landed property encourage a stable rural society of peasant-proprietors carrying on a small scale subsistence farming, whereas in other countries the same laws encourage capitalistic farming as a commercial undertaking and concentrate the ownership of land among a small number of people. This widespread distribution of landed property in our country discourages large scale farming and prevents commercialisation of agriculture. It causes a good deal of loss to the cultivating classes, because their units are small and they cannot secure the economies of large scale production. The greatest harm caused to agriculture by these laws is excessive sub-division and fragmentation of holdings. On the partition of the joint family, all the sons claim a share in all the fields which increases fragmentation and uneconomic holdings. Many a time it results in prolonged litigation and ruin of the cultivating class. The work of consolidation of holdings started by the government of Uttar Pradesh is difficult to be carried out swiftly and smoothly partly because of such laws of inheritance.

(१) द्रव्यमपुत्रस्य सोढया आतरः सहजीविनो वा हरेयुः कन्याद्वचरिष्यम् ।
पुत्रवतः पुत्राः दुहितरो वा धर्मिष्ठेषु विवाहेषु जाताः । (कौ० ३।५)

देशस्य जात्या संघस्य वर्गो ग्रामस्य वापि यः ।

इचित्तस्तस्य तेनैव दायवर्गं प्रकल्पयेत् ॥ (कौ० ३।७)

The problem, therefore, involves the amendment of the personal law of the principal communities in India, requiring equal division of the landed property as between the heirs of an occupant of land. In successive generations, this leads to excessive fragmentation and dispersal of cultivated land. Alternatively, the reorganisation of land in Compulsory Universal Co-operative Corporations, embracing the entire gamut of rural life in a whole village or groups of villages, devoting themselves to specialised farming on an intensive scale would obviate the need for radical change in the traditional system of inheritance that has characterised this ancient land for centuries. The latter would, in fact, be much more effective in securing the objective mentioned above than the former, and as such greater emphasis has been placed upon it. But it can not be carried out without the necessary power and authority, funds and functions granted by the sovereign legislature¹.

Division Of Land

A characteristic feature of ancient land policy in India was the division of all available land of a village for different purposes. Such land was generally divided into forests, pasture or grazing ground and the cultivated area. The forests those days must have been much more extensive than at present. The pastures must have included large spaces needed for the cattle ranches. According to Panini who is believed to have preceded Kautalya by a century or so, a village included cultivated and uncultivated land. The land which was not under the plough included 'Ushara' (waste land), 'Gochar' (pasture land) and cattle-pens (Goshtha). The Vedic hymns also refer to Vraja and 'Goshtha' as given later in the next chapter. The general word for arable land was 'Karsha', but the area actually brought under the plough was called 'Halya' and 'Sitya'. According to Dr. V. S. Agrawal, 'Halya' was the unit of land cultivated with the plough, as may be inferred from the examples—'Dvi-halya' and 'Tri-halya'. A bigger unit of land measure was called 'param-halya' and 'Param-sitya'. A systematic survey of agricultural land appears to have been undertaken by special officers called 'Kshetrakara' who measured out each field and fixed its area². The estimated area of individual fields was further expressed in terms of the quantity of seed required for its sowing.

(1) National Planning Committee Series — (Report of the sub-Committee on Land Policy and Agricultural Labour & Insurance).

(2) India as known to Panini—Dr. V. S. Agrawal,

Pastures appear to have been held in common by the village for the grazing of its cattle. The village also had its cattle-ranches called 'Goshtha' or 'Vraja'. Settlements of cow-herds were known as 'Goshtha'. The site of the ranches was subject to shifting owing to exigencies of fodder. The entire village land was marked out for habitation, grazing, damping of manure and agriculture, the last three shifting after every twelve years¹. Manu has referred to a measure of land named 'Kula' equivalent to two plough-lands and has pointed out that the 'Adhipati' of ten villages should have one 'Kula' measure of land, that of twenty villages five 'Kulas'². Kautilya has also referred, in his own way, to the division of all available land of village where-in provision was made for pasture grounds on uncultivable tracts and forests for different purposes³. It may, therefore, be pointed out in conclusion that land, the source of all raw material for industry and still more important of food-stuffs, animal husbandry or stock breeding and forests, had been carefully considered in its layout, utilisation and exploitation. In spite of the right of private property in land, with the essential limitations, and the corresponding rights of the state, the art and science of settlement, cultivation, division and development of land was fully known to the people of this country in ancient times. May it not be concluded, therefore, that the principle of equi-marginal utility or the doctrine of maximum satisfaction seems to have been applied to the division and utilization of land which can guide us still for building afresh our countryside.

(1) India as known to Panini—Dr. V. S. Agrawal.

(2) दशो कुलं तु भुञ्जीत विंशो पञ्चकुलानि च । (मनु०७।११९)

(3) अकृष्यायां भूमौ पशुभ्यो विबोधितानि प्रयच्छेत् ॥
प्रविष्टामयस्थावरजङ्गमानि च ब्राह्मणेभ्यो ब्राह्मणसोमारण्यानि
तपोवनानि च तपस्विभ्यो गोकुलपराणि प्रयच्छेत् ॥ (की०२।२)

CHAPTER V

CATTLE WEALTH AND DAIRYING

बोगध्रो धेनुर्वोढानङ्गवानाशुः सप्तिः पुरन्धिर्योषा,
जिष्णू रथेष्ठाः..... जायताम् ॥ (यजु० २२।२२)

माता दद्याणां दुहिता वसूनां स्वसावित्र्यानाममृतस्य नाभिः ।
प्रानुवोचं चिकितुषे जनाय मा गामनगामविति वधिष्ठ ॥ (ऋ० ८।१०१-१५)
धेनुं सवनं रयीणाम् । (अथर्व० ११।१।३४)

धारयन्ति प्रजादध्वं पयसा हविषा तथा ।
एतासां तनयाश्चापि कृषियोगमुपासते ॥

जनयन्ति च धान्यानि बीजानि विविधानि च । (म०अनुशा०पर्व अ०८३)

गोपालकपिण्डारकदोहकमन्थकलुब्धकाः शतं शतं धेनूनां
हिरण्यभूताः पालयेयुः । (की० २।२९)

Pivot of Economic Life

The cattle wealth of our country has an intimate bearing on its agricultural development, health and economic prosperity of the people. The welfare of our people and the progress of our agriculture are bound up with the welfare of our cattle. The love in which the cow is held in India is based as much on a deep-rooted sentiment as on economic and health grounds. Bullocks are the means of transport everywhere in our villages and their power is available for various agricultural operations. According to ancient history, cows and bullocks were the most valuable possessions of the people in our country. They constituted the chief form of wealth and 'Dakshina' (sacrificial fee) and presents.¹ 'Make us rich in cows' is the spirit of many Vedic hymns.² All the three higher classes of the society were engaged in cattle-keeping in their own way. Cattle served, in a

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- (१) अश्मको हेमभृङ्गोदध बोगध्रोहूमविभूषिता ।
सवस्ताः कुम्भबोहाश्च गाः सहस्राण्यवाद् दश ॥ (म० सभापर्व अ० ५१)
अनङ्गवाहं सुव्रतं यो ददाति हलस्य बोढारमनन्तवीर्यम् ।
धुरन्धरं बलवन्तं युवानं प्राप्नोति लोकान् दश धेनुदस्य ॥
(म० वनपर्व अ० १८६)

- (२) याः सरूपा विरूपा एकरूपा यासामग्निरिष्ट्या नामानि वेद ।
या अङ्गिरसस्तपसेह चक्रस्ताम्यः पर्जन्य महि शर्म यच्छ ॥
(ऋ० १०।१६९।२)

way, as the standard of value or as a medium of exchange. Many of the popular social titles in ancient India were awarded, it is pointed out, to the people looking after cattle wealth of the country on the number and strength of cows they possessed. Such titles were popularly known as 'Nanda, Upnanda, Nandaraj and Brishabhānu'.¹ Our national government have also introduced the award of 'Gopal Ratna' to those who look after their cattle, specially cows, in the best possible way for feeding and breeding.

Uttar Pradesh has always been regarded as one of the premier cattle breeding states in the Indian Union. 'Vraj' famous in folklore for its cows in the time of Lord Krishna presents an unhappy picture today when compared with its memorable past. The love and reverence for the cow which endeared Lord Krishna to us as 'Gopal' has to be rehabilitated. The land where the Aryans, according to history, settled during the course of their early move to this sub-continent has once again to assume its rightful place. At present only a fraction of the contribution, which animal husbandry and dairying can make to the growth of rural population and economy and to a rise in living standards, is being realised. Any plan of national reconstruction has, therefore, to give high priority to the development of India's Cattle-wealth. In providing for an outlay of over Rs. 40 crores for animal husbandry and about Rs. 22 crores for dairying, it is hoped that during the second five year plan greater progress will be made in this branch of national activity than has been so far possible.

A King's Regard For Cow

The 'Purusha Sukta' of Yajurveda points out the origin of different kinds of animals including the cow from the Great Lord.² Whatever be its origin, it was most probably due to the

- (१) नन्दः प्रोक्तः स गोपालं नन्दलक्ष गवांपतिः ।
 उपनन्दश्च कथितः पन्धलक्षगवां पतिः ॥
 वृषभानुः स उक्तो यो दशलक्षगवां पतिः
 गवां कोटिगृह्ये यस्य नन्दराजः स एव हि ।
 कोट्यर्थं च गवां यस्य वृषभानुवरस्तु सः ॥
 (गोहृत्या या राष्ट्रं हृत्या) लेखक—प्रकाशवीर विद्याभास्कर

- (२) तस्माद्यज्ञात्सर्वद्वृतः सम्भूतं पृषदाज्यम् ।
 पशून्तांश्चक्रे बायव्यानां रण्या ग्राम्याश्च ये ॥
 तस्माददवाऽअजायन्त ये के चोभयादतः ।
 गावो ह जज्ञिरे तस्मात्तस्माज्जाताऽअबावयः ॥ (यजु० पु० सू०)

importance of cow and its progeny in the economic life of the country that she became sacred and an object of worship. This sanctity of the cow can be traced back to very olden times. The name of 'Aghanya' (not to be killed), applied to the cow, is as old as the Rig Veda. A fairly long hymn in the Atharva-Veda shows the reverence inspired by the cow. Undoubtedly the origin of the sanctity of the cow lay in its inestimable value to the national economy of the land. The occasional mythological identification of the cow with the Earth or Aditi helped the process which culminated in its full-fledged deification in later times. The famous 'Kamdhenu' of sage 'Vashishtha' was, it is recorded, capable of fulfilling all desires and arranging for entertainment of many men at a time.¹ According to the Mahabharat, the 'Kshir Sagar' (the so-called ocean of milk) arose from the flowing current of nectar like milk of the famous cow 'Surbhi'. It is further recorded, therein, that its progeny—four daughters of the famous cow are upholding the four sides of the Rasatal world.²

Mother cow has, therefore, been highly regarded and respected by us for centuries and her protection and care has been an article of faith with the Hindus. According to Hindu mythology, Lord Krishna tended and sheltered millions of cows; king Dilip offered his own life for saving the life of his preceptor's cow named Nandini. Arjun courted exile for twelve years in order to rescue a Brahman's cow. Conflicts arose among kings for taking possession of other's cows as is proved by the

- (१) तस्याय कामधुग् धेनुवसिष्ठस्य महात्मनः ।
 उक्ता कामान् प्रयच्छति सा कामान् बुद्धते सदा ॥
 प्राग्यारण्याश्चोषधीश्च बुबुहे पय एव च ।
 बहसं चामृतनिभं रसायनमनुत्तमम् ॥
 भोजनीयानि पेयानि भक्ष्याणि विविधानि च ।
 लेह्याभ्यमृतकल्पानि शोण्याणि च तथाजुनः ॥
 रत्नानि च महाहर्षिण वासांसि विविधानि च ।
 तैः कामैः सर्वसम्पूजैः पूजितश्च महीपतिः ॥ (म० आदिपर्व अ० १७४)

- (२) इदं रसातलं नाम सप्तमं पृथिवीतलम् ।
 यत्रास्ते सुरभिर्माता गवाममृतसम्भवा ॥
 क्षरन्ती सततं क्षीरं पृथिवीसारसम्भवम् ।
 वृष्णां रसानां सारेण रसमेकमनुत्तमम् ॥
 यस्योः क्षीरस्य धाराया निपतन्त्या महीतले ।
 हवः कृतः क्षीरनिधिः पवित्रं परमुच्यते ॥
 अस्याश्चतस्रो धेनवोऽग्न्या विष्णु सर्वासु मातले ।
 निवसन्ति दिशां पाल्यो धारयन्त्यो दिशः स्म ताः ॥

(म० उद्योगपर्व अ० १०२)

'Goharan Parva' of the Mahabharat¹. The cow was regarded as sacred and anybody who hurt or caused to hurt it was liable to death penalty. It was because of such reverence inspired by the cow that Kautalya also advised the king to get into his court after having saluted a cow with its calf and a bull by circumambulating round them². We may discard all this as old superstition unless science of Indian economics proves it otherwise. Both Rishi Dayanand and Mahatma Gandhi had realised the socio-economic importance of cow for India. The former analysed the economic value of the cow in his book 'Gokarunanidhi' for the people of our country. Gandhiji regarded the cow as the mother of prosperity for the people of this land. It is, therefore, heartening to note that protection of cow was one of the recommendations of the 'Gosamvardhan Committee' in which members belonged to every community and were unanimous on this point. The question of protection of cows should not be given any political tinge, because they are the most useful animals in our agricultural economy. The U. P. government have decided to observe throughout the state 'Gopasthmi Week' from November 15 to 22 every year to focus the attention of the people on the problem of animal husbandry in general and to stress the importance of the cow in particular. The idea behind the move is to canalise the religious sentiments of the people from mere worship of the cow to her real service.

Milk And Milk Products

Popular opinion throughout the world on dieting is that milk and milk products are the best diet for human beings from infancy to old age. We find references in Vedic literature that milk and its products chiefly clarified butter (ghrita) formed the principal ingredient of food. Milk was a favourite drink and the list of milk products shows the great popularity of milk as a drink during the Vedic age. There are hymns in Atharva and Yajurveda which indicate in brief, the scale of milk consumption in ancient India. The Atharva-veda suggests keeping of a good number of cows so that we may feed our heroes with cow's

(१) मत्स्यराष्ट्रं हनिष्यामि ग्रहीष्य मत्स्यं गोघनम् ।

ग्रहीते गोघने नूनं तेऽपि योत्स्यन्ति पाण्डवाः ॥

(म० विराट पर्वणि, गोहरणपर्व अ० २९)

(२) सवत्सा घेनुं वृषभं च अदक्षिणीकृत्योपस्थानं गच्छेत् ॥

(कौ० १।१९)

milk and butter¹. Cow's milk was undoubtedly the most important drink. From the 'Sabha Parva' of the Mahabharat, we learn that for the 'Rajsuya' sacrifice of king Yudhishtira large stocks of curd and ghee had been accumulated which looked like rivers of curds and tanks of ghee². At another place in the Mahabharat, we note Sahdeva offering chiefly milk and its products to other Pandavas when he adopted the form of a 'gopa'³. It is believed that in the big cattle pens of Nanda Baba several lakhs of cows were kept and milked everyday. Young Krishna was very fond of milk, curds and butter which must have given him strength enough to deal effectively with the wild Kubalya elephant, to take the life of Chanur, drag Kansa by the forelock and finish with him⁴.

India is deficient these days in the supply of milk to her growing population, because Indian cattle are under-nourished as compared to those of the western countries. Indian cows yield much lower quantities of milk than those of other countries and the chief reason is the unfavourable economic circumstances under which animal husbandry is carried on in our country. According to the first five year plan, the average per capital consumption of milk and milk products was worked out at 5.5 ounces which comes to about 2.5 chhataks or one-sixth of a seer per day. The consumption of milk and milk

- (१) चतुरः कुम्भांश्चतुर्षा ववामि क्षीरेण पूर्णां उवकेन वचना ।
एतास्त्वा धारा उप यन्तु सर्वाः स्वर्गं लोके मधुमत् पिवमाना ॥
उपस्था तिष्ठन्तु पुष्करिणीः समन्ताः । (अथर्व० ४।३४।७)
पूर्णं नारि प्र भर कुम्भमेतं घृतस्य धाराममृतेन संभताम् ।
(अथर्व० ३।१२।८)

सं सिचामि गवां क्षीरं समाज्येन बलं रसम् ।
सं सिक्ता अस्माकं वीरा ध्रुवा गावो मयि गोपती ॥
(अथर्व० २।२६।४)

- (२) एवं प्रवृत्ते यज्ञे तु पुष्टपुष्टजनायुते ।
अन्नस्य बहवो राजन्मृतेषाः पर्वतोपमाः ।
वधिकुर्याच्च ववृक्षुः सपिषां च हृवाञ्जनाः ॥
(म० सभापर्व अ० ४५)

- (३) सहवेवोऽपि गोपानां वेषमास्थाय पाण्डवः ।
वधि क्षीरं घृतं चैव पाण्डवेभ्यः प्रयच्छति ॥
(म० धिराट पर्वणि-समय पालन पर्व अ० १३)

- (४) एरावतं ययूत्सस्तं मातङ्गानामिवर्षभम् ।
कृष्णः कुबलयापीडं हृत्वास्तस्य पश्यतः ॥
आम्भ्रं मल्लं च चाणूरं निजघ्नान महासुरम् ।
तं सभास्थं सहामात्यं हृत्वा कंसं सहान्वयम् ।
मानयामास मानाह्वी देवकीं ससुहृद्गणाम् ॥ (म० सभापर्व अ० ३८)

products, however, varies considerably in different parts of the country. It is the highest in the Punjab. Governments in Australia, Denmark, Ireland, United Kingdom, Japan, and some other countries, it is reported, make arrangements for the supply of milk to the school going children, but very little progress has been made in our country in this field. The quantity of milk required for supply to school going children below 12 years of age, would itself be considerable. To meet the requirements of the country in this field, the minimum quantity of milk required will be two to three times of what is produced at present. This greater production of milk is possible with a scientific system of animal husbandry and by bringing back ancient glory to the cow as pointed out in the Mahabharat¹.

Scientific Animal Husbandry

In a predominantly agricultural country like India where cattle are still the chief source of motive power for agricultural operations, a scientific system of animal husbandry is most essential. India has to support about one-fourth of the world's total cattle population. Despite this large population, the net value of livestock products amounts to a low percentage of the income from agriculture. Agriculture and animal husbandry are complementary to each other. Except in a few favourable localities where there are special facilities for enabling cattle breeding to be developed as an independent industry, the rearing of cattle is an industry subservient to agriculture. Lack of adequate facilities in this respect is the most important cause of the poor condition of our cattle. Increased facilities for training and strengthening of the administration of animal husbandry, programmes have to be provided for meeting the protein deficiency in Indian dietary. Large numbers of cattle lead to poor feeding and poor feeding comes in the way of attempts to raise productivity. The problem of cattle development in India can be considered under these heads—(a) feeding (b) breeding (c) protection against disease (d) removal of useless cattle. The Atharva Veda directs for proper feeding and breeding of cattle².

- (१) घृतक्षीरप्रदा गावो घृतयोन्म्यो घृतोद्भवाः ।
 घृतनद्यो घृतावर्तस्ता मे सन्तु सदा गृहे ॥
 गावो ममाग्रतो नित्यं गावः पृष्ठत एव च ।
 गावो मे सर्वतर्धैव गवां मध्यं वसाम्यहम् ॥

(म० अनुशासन पर्व अ० ८०)

- (२) मया गावो गोपतिना सचध्वमयं वो गोष्ठ इह पोषपिण्डः ।
 रायसपोषेण बहुला भवन्तीर्जीवा जीवन्तीरूप वः सेपमा ॥
 प्रजावतीः सूमनसे दशन्तीः शुद्धा अपः सुप्रमाणे ।
 मा व स्तेन ईशत माघशंसः परिवो वरस्यहेतिवृणक्तु ॥ (अथर्व० ३।१४)

Feeding

Feeding is an important problem for maintenance and production of cattle. Cattle fodder and well-maintained pastures are the secrets of successful cattle husbandry and good breeds are found in such areas. Good food can help to improve the milk yield and draught capacity of cattle. The cattle feed at present lacks in vital nutrients necessary for upkeep. They subsist on the most meagre ration i. e. the by-product of agriculture. There is no proper and systematic cultivation of fodder crops in our country and the present deterioration of cattle in India is mainly due to malnutrition and improper breeding. During the Vedic age, pasture lands were carefully looked after and large sheds or stalls were erected for accommodation of cattle. On the whole the cows were taken extremely good care. They were kept in stalls during the night and in the heat of the day. They were allowed to roam freely in the pastures at other times and were milked three times every day. Sukta 146 of tenth Mandal of Rig Veda, also known as Arannyani Sukta, clearly suggests the existence of extensive and pleasant pastures where cows could graze with ease and comfort¹. The Atharva Veda directs for maintaining large pastures for grazing of cattle.

In our country, available cattle feeds and fodder resources are hardly enough for only about 60% of her total cattle population. Under-nutrition is probably the greatest single factor responsible for deterioration of our cattle and there is a great need for the use of leguminous crops and the reservation of pasture lands. It cannot be denied on any ground that the provision of adequate pasture land for our cattle is of very great importance to the rural economy of India.

The 'Ghoshyatra Parva' (Vana Parva) of the Mahabharat brings before us the location of suitable pastures, for the cattle wealth of Kaurav king, in beautiful forests of the country².

- (१) उत गाव हवावन्त्युत वेदमेव वृश्यते ।
 उतो अरण्यानिः सायं शकटीरिव सर्जति ॥
 गामङ्गं वा हवयति वावङ्गं वा अपावधीत् ।
 वसन्नरण्यान्यां सायमकृक्षविति मन्यते ॥
 आञ्जनगन्धिं सुरभिं वह् वस्त्रमकृषीवलाम् ।
 प्राहं मृगाणां मातरमरण्यानिमशंसिषम् ॥ (ऋ० १०।१४६)

- (२) घोषा वृत्तवने सर्वे त्वत्प्रतीक्षा नराधिप ।
 घोषयात्रापदेशेन गमिष्यामो न संशयः ॥
 रमणीयेषु वेशेषु घोषाः सम्प्रति कीरव ।
 स्मारणे समयः प्राप्तो वत्सानामपि चाङ्गु नम ॥

(म० वनपर्वणि-घोषयात्रा पर्व अ० २३९)

Manu, in his Smṛiti, has referred to the provision of such pastures both round a village and a city. The area to be left fallow around a city had to be thrice of that which was left around a village. Such fallow grounds were called 'Parihar'¹. Kautalya, in his Artha Shastra, has given separate chapters for discussing the duties of 'Superintendent of cows, Superintendent of horses and Superintendent of elephants'. He has discussed their duties in detail and has pointed out that the Superintendent of cows was to supervise different types of herds of cattle—herds maintained for wages, herds maintained for fixed amount of dairy produce, useless and abandoned herds, herds of cattle that were irrecoverably lost and such others². He has given full details for feeding different types of cattle as well as for their milking. According to him, for bulls which were provided with nose-strings and which were equal to horses in speed and in carrying loads, half a bhara of meadow grass, twice the above quantity of ordinary grass, one tula of oil cakes, ten adhaks of bran, five palas of salt, one kudumba of oil for rubbing over the nose, one adhaka of curds, one drona of barley, one drona of milk, half an adhaka of sura, one prastha of oil or ghee, 10 palas of sugar or jaggery, one pala of the fruit of ginger was to be the diet. The same commodities less by one quarter each were to form the diet for mules, cows and asses; twice the quantity of the above things for buffaloes and camels. Draught oxen and cows, supplying milk, were to be provided with subsistence in proportion to the duration of time the oxen were kept at work and the quantity of milk which the cows supplied. All cattle were to be supplied with abundance of fodder and water³.

- (१) धनुः शतं परीहारो ग्रामस्य स्यात्समस्ततः ।
 शम्पापातास्त्रयो वापि त्रिगुणो नगरस्य तु ॥
 तत्रापरावृतं चान्यं विहित्यः पशवो याव ।
 न तत्र प्रणयेद्दण्डं नृपतिः पशुरक्षिणाम् ॥
 (मनु० ८।२३७-२३८)
- (२) गोऽश्वक्षो वेतनोपग्राहिक करप्रतिकरं भग्गोत्सृष्टकं
 भागानुप्रविष्टकं व्रजपर्यग्रं नष्टं विनष्टं क्षीरघृतसंजातं चोपलभेत ॥
 (को० २।२९)
- (३) बलीवर्दानां नस्याद्वयभद्रगतिवाहिनां यवसस्यार्धभारस्तृणस्य द्विगुणं
 तुला धानपिण्याकस्य दशाढकं कणकुण्डकस्य पञ्चपलिकं मुखलवणं
 तैलं कुडुबो नस्यं प्रस्थः पानं मांसतुला दहनदद्याढकं यवद्रोणं
 माषाणां वा पुलाकः क्षीरद्रोणमर्षाढकं वा सुरायाः स्नेहप्रस्थः
 क्षारदशकलं अङ्गिः बेरपलं च प्रतिपानम् ॥ पादोनमश्वतरगोखराणां
 द्विगुणं महिषोष्ट्राणां कर्मकरबलीवर्दानां पायनार्थानां च ॥ धेनूनां
 कर्मकालतः फलतश्च विधावानम् ॥ सर्वेषां तृणोदकप्रकाम्यमिति
 गोमण्डलं व्याख्यातम् ॥
 (को० २।२९)

Cowherds endeavoured to keep cattle away from dangers. They were to graze the herds in forests which were severally allotted as pasture grounds for various seasons and from which thieves, tigers and other molesting beasts were driven away by hunters aided by their hounds. Cowherds were to allow their cattle to enter into such rivers or lakes as were of equal depth all round, broad and free from mire and crocodiles and were to protect them from dangers under such circumstances¹. During the rainy, autumnal and the first part of winter seasons they were to milk the cattle both the times (morning and evening); and during the latter part of winter and the whole of the spring and summer seasons, they were to milk only once (in the morning). The cowherd who milked a cow a second time during these seasons was to have his thumb cut off, and if he allowed the time of milking to lapse, his share of the profit was forfeited².

Breeding

Cattle breeds are generally classified as milch, draught and dual purpose breeds. From the point of view of the cultivator the dual purpose animal is the most useful. India has well defined local breeds, but most of the cattle population of the country is, however, of a non-descript type. The objective before the experts in animal husbandry has to be to upgrade such cattle with pedigree bulls of the particular breed indicated for a certain locality. The science of cattle breeding is very old in our country. Cowherds were called 'Gopal' and special officers incharge of royal cattle were called 'Tantipal'. In the 'Virata Parva' of the Mahabharat, the youngest pandava Sahdeva introduced himself as Tantipal of king Yudhishtira. He had also pointed out that he knew the breeding and branding of different types of cattle³. References in the Mahabharat also make it

- (१) लव्यकश्वगणिभिरपास्तस्तेनद्यालपरबाधभयमृतुविभक्तमरण्यं
चारयेयुः ॥ समव्यूढतीर्थमकर्वमग्राहमुक्कवतारयेयुः पालयेयुश्च ॥
(को० २।२९)
- (२) वर्षाशिरद्धेमन्तानुभयतः कालं बुह्युः ॥ शिशिरवसन्तप्रीष्मानेककालम् ॥
द्वितीयकालदोग्धरङ्गच्छद्दो दण्डः ॥ दोहकालमसिकामतरतस्फलहानं
दण्डः ॥
(को० २।२९)
- (३) गोसंख्याता भविष्यामि विराटस्य सहीपतेः ।
प्रतिषेद्धा च दोग्धा च संख्याने कुशलो गवाम् ॥
तन्तिपाल इति ख्यातो नाम्नाहं विदितस्त्वय ॥
निपुणं च चरिष्यामि ज्येते ते मानसो ज्वरः ॥
शेष भगले प्रष्ट पर

clear that a census of royal cattle was taken and Kaurava king Duryodhan was interested in such a census¹.

According to Panini, the different stages in the life cycle of a cow were expressed by suitable terms. The heifer attaining puberty was termed 'Upasarya' and her first mating season, 'Upasara'. Panini has also referred to 'Mahagri-shti', a better cow whose milking period continued upto the next calving. Panini has referred to the famous 'Salvaka' breed of bulls reared in the Salva country². A detailed classification of all types of cattle has been given by Kautalya and such a classification depended mostly on the system of breeding. All such cattle were to be branded by the superintendent concerned³.

Diseases of Cattle

During the Vedic days, a much dreaded disease affecting generally cows was 'Yakshma'. There are references in the Atharva Veda to guard against such a disease. The knowledge of the science of veterinary was quite popular even during the days of the Epics. Shri Krishna was not merely a Gopal, but he was an expert in the science of treating horses and keeping

अरोगा बहुलाः पृष्ठाः क्षीरवत्यो बहुप्रजाः ।
निष्पन्नसत्वाः सुभृता व्यपेतज्वर किल्बिषाः ॥
लक्षणं चरितं चापि गवां यच्चापि मङ्गलम् ।
तत् सर्वं मे सुविदितमन्यच्चापि महीपते ॥
वृषभानपि जानामि राजन् पूजितलक्षणान् ।
येषां मूत्रमुपाध्राय अपि वन्द्या प्रसूयते ॥

(म० वि० प० पाण्डवप्रवेशपर्व अ० ३)

(१) अथ दुर्योधनो राजा तत्र तत्र वने वसन् ।
जगाम घोषानभितस्तत्र चक्रे निवेशनम् ॥
ददर्श स तदा गावः शतशोऽथ सहस्रशः ।
अङ्गुलैर्भक्ष्य ताः सर्वा लक्षयामास पायिवः ॥
अङ्गुयामास वत्साश्च जज्ञे चोपसृतास्त्वपि ।
बालवत्साश्च या गावः कालयामास ता अपि ॥

(म० वनपर्वणि घोषयात्रापर्व अ० २४०)

(2) India as knowu to Panini. (Dr. V.S. Agrawal, p. 223)

(३) वत्सा वत्सतरा दम्प्या वहिनो वृषा उक्षाणश्च पुङ्गवाः
युगवाहनशकटवहा वृषभाः सूना महिषाः पृष्ठस्कन्धवाहिनश्च
महिषाः वत्सिका वत्सतरी प्रण्ठीही गर्भिणी धेनुश्चाप्रजाता वन्द्याश्च
गावो महिष्यश्च, मासद्विमासजातास्तासामुपजा वत्सा वत्सिकाश्च,
मासद्विमास जातानङ्गुयेत ॥

(की० २।२९)

them fit¹. According to Kautalya, the Superintendent of horses was not only to register the breed, but to note their different diseases also. Veterinary surgeons were to apply requisite remedies against undue growth in the body of horses and to change their diet according to changes in seasons. The same rules were to apply to the treatment of cows, bulls, buffaloes, goats and sheep². Rinderpest and other cattle diseases, these days, take a large toll of life of the cattle population of the country and the problem has to be met with sincere and scientific efforts as in the days of Kautalya.

Conditions in India now-a-days are quite different from those of the Vedic age or the days of the Epics. Both the human and cattle population of the country, it must be admitted, have increased considerably since then, and problems of feeding, breeding, cure of diseases have acquired a greater prominence than they had in the past. Removal of useless cattle is by far the most important and most difficult problem of cattle development in the country. Passing of legislation does not solve the problem of useless, unprofitable, stray cattle, because they might be saved from the butcher's knife but not from starvation. It would be necessary to provide for 'Gosadans', 'Goshalas' and 'pinjrapoles' on a larger scale than it has been done so far. The Animal Husbandry Department will have to extend the 'Key village Schemes' on a wider basis. The signs of the times are that this scheme will succeed as the villagers are showing keen initiative in its success, but they have to be made conscious of the past traditions and achievements of the country in the science and art of Animal Husbandry.

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- (१) तेषां श्रमं च ग्लानिं च वमथुं व्रणान् ।
 सर्वं व्यपानुवत् कृष्णः कुशलो ह्यश्वकर्मणि ॥
 स ताल्लव्योदकान् स्नातान् जग्धास्नान् विगतबलमान् ।
 योजयामास संहृष्टः पुनरेव रथोत्तमे ॥

(म० जयद्रथवधपर्व अ० १००)

- (२) अश्वानां चिकित्सकाः शरीरह्लासवृद्धिप्रतीकारमनुविभक्तं बाहारम् ॥
 (की० २।३०)

CHAPTER VI

COTTAGE INDUSTRIES AND CO-OPERATIVE MOVEMENT

जरतीभिरोषधीभिः पर्णेभिः शकुनानाम् ।
कार्मारो अश्मभिर्द्युभिर्हिरण्यवन्तमिच्छति ॥
कारुरहं ततो भिषगुपलप्रक्षिणी नना ।
नानाधियो वसूयवोऽन् गा इव तस्थिम ।

(ऋ० १।११२।२-३)

सूत्रवल्कमयी रज्जुः वरत्रा वंत्रवर्णवीः ।
सर्नाह्या बन्धनीयाश्चयानयुग्मस्य कारयेत् ॥

(कौ० २।२३।२३)

सङ्गच्छध्वं संवदध्वं सं वो मनांसि जानताम् ।
देवा भागं यथा पूर्वं सृजानाना उपासते ॥

(ऋ० १०।१११)

सम्भोजनं संकथनं सम्प्रश्नोऽथ समागमः ।
एतानि ज्ञातिकार्याणि न विरोधः कदाचन ॥

(म० उद्योग पर्व अ० ६४)

Role Of Cottage Industries

Cottage and small scale industries have played an important role in our national economy since times immemorial. Even if we launch a programme of large scale industrialisation, there will still be a great scope for cottage and small scale industries in the economy of the country. The inherited institutions under which we live to-day postulate a practically self-sufficient rural society and the economy it visualised was that of agriculture and hereditary handicrafts. Though this economic system has partly broken down with the growth of industrialisation, it has still its hold on the rural life of the country. India occupied a leading position in the industrial world in the past and the old Indian industries were mostly carried on the cottage basis. A re-thinking on social, economic and political values and a re-organisation of all such institutions becomes, at times, necessary in the history of a Nation. It applies more in case of India to-day than any other country.

As pointed out by Pt. Govind Ballabh Pant, 'Congress mind has always been clear on the question of cottage industries, and although it is on all hands recognised that in this age of science and technology heavy industries occupy a basic place in the economy of the country for its advancement; customs and traditions, our old skill in handicrafts that still is able to produce articles of endless variety, texture and beauty, our growing population, the immense pressure on land which somewhere has reached the need for finding immediate solution for providing gainful employment to the huge number of our unemployed and under-employed, all demand a re-emphasis on the issue of cottage and small industries side by side with big industry. There is nothing contradictory in this attitude and both can exist together and supplement each other's efforts to raise the economic level of the country. Our resources are unmeasured and can absorb all talents in the country for their exploitation. Big industry needs investment on a colossal scale to satisfy the growing demands, and to start with, such investment is beyond our capacity. Rate of capital output for big industry is much more than for cottage one and the latter has considerably, more employment potential. Although since attaining our freedom, we have directed efforts towards cottage industry programme, further thought might be given to fundamental questions like policy of taxation relating to these industries and the demarcation of lines of production as between big and small industry so that inroads by one on the other, or confusion due to indistinct definition of boundaries may be reduced to the minimum'¹.

Ancient Arts And Crafts

Ancient Aryans in India practised all the arts and crafts needed by society. Among the important occupations besides agriculture and animal husbandry, the first place was given to weaving both in cotton and wool. Since the earliest days of history, wool has played an increasingly active part in the social and economic development of the world. Wool was of great importance in the life of the people during the Vedic period. The Aryans were a civilised people who migrated from Central Asia into the plains of North India and made this country their permanent home. Agriculture and animal husbandry were their chief occupations. Wool from domesticated sheep was spun and woven by women who were experts at the job. The Rig Veda refers to the famous wool of Gandharian sheep and the Yajur Veda hymn proves spinning and weaving of wool with

a certain technique¹. Indus Valley was considered the home of 'Urnavati' and consequently was famous for its wool and wool-cloth. The discovery of a number of spindles in the ruins of Mohanjodaro (now in Pakistan) has led to the belief that men of that period were well versed in the art of weaving. That both the rich and poor practised spinning is indicated by the wheels being made of the expensive quality as well as of the cheap pottery and shell. Dyer's vats found on the site indicate that dying was practised².

Egyptian mummies dating from 2000 B. C. have been found wrapped in Indian muslin of the finest quality. It has been stated that a sample examined by Dr. Taylor in 1846 came to 250 miles to a pound of staple—a feat which modern machinery has yet failed to accomplish. In the tenth Mandal of Rig Veda Sukta 155, we find a hymn for the development of arts and crafts to do away with poverty³. For the development of quality and technique of spinning, the Rig-Veda as well as Yajur Veda give us many indications. The triple twisted thread was known to the Rig Vedic Aryans and they could spin the finest count⁴. The Yajur Veda gives us an idea that spinning could bring wealth to the country. The two most important functions for the ladies in the household, as pointed out in the Rig Veda, were proper care of children, spinning and weaving. Another hymn in Rig Veda (10th Mandal) is indicative of different types of fine cloth woven from the wool of sheep, by a weaver⁵. The four hymns of Sukta 112 of Rig Veda Mandal nine clearly

(१) उषोष मे परा मृश मा मे दध्नाणि मयथाः ।

सर्वाहमस्मि रोमशा गन्धारोणामिवाविका ॥

(ऋ० १।१२६।७)

सीसेन तन्त्रं मनसा मनोषिण ऊर्णासूत्रेण कवयो वयन्ति ।

(यजु० १९।८०)

(2) History and culture of India—Vol. 1—Vedic Age.
(Bhartiya Vidya Bhavan Bombay)

(३) अबो यदाह प्लवते सिन्धोः पारे अप्लवम् ।

तदा रभस्व बुह्यो तेन गच्छ परस्तरम् ॥

(ऋ० १०।१५५।३)

(४) स सूर्यस्य रश्मिभिः परि व्यत तन्तुं तन्वानस्त्रिवृतं यथा विदे ।

नयन्तस्य प्रशिषो नवीयसीः पतिजनानामप याति निष्कृतम् ॥

(ऋ० ९।८६।३२)

(५) आषोषमाणायाः पतिः शुचायाश्च शुचस्य च ।

वासोवायोऽवीनामा वासांसि ममूजत् ॥

(ऋ० १०।२६।६)

indicate that different people have different tastes and temperaments and, therefore, take up different types of occupations in their life¹. References to the art of fashioning chariots for war and race and carts for agriculture and transport indicate that carpentry was a popular profession, the carpenter being also a wheelwright and joiner. The worker in metal smelted ore in the furnace and house-hold utensils were made of metals. The art of tanner and the use of hides were well known. Ox hide was used to manufacture bowstrings, thongs and the lash of the whip. Carpenters built chariots, carts, boats and ships. Many of them were skilled in wood-carving. The blacksmiths supplied various necessities of life from the fine needles and razors to the sickles, ploughshares, spears and swords. Goldsmith worked in gold and jewels and ministered to the needs and fashions of the gay and rich. The physician had also an important place in the society and he cured diseases by means of the healing virtues of plants. There is definite information to show that ancient India during Vedic days had skilled masons, accomplished stone cutters and dainty jewellers². In the Epic poem Ramayan are found the foundations of cultural heritage of India. In Ayodhya Kanda, Valmiki described Ayodhya as inhabited by weavers, iron smiths, 'Mayurak' — peacock fan-makers, 'Krachik' — saw-man, 'rochak'—glass-maker, 'swarnakar' — goldsmith, 'Dhupak' — incense-burner, 'Turnvaya'—tailor, etc. Similarly descriptions of various artistic handicrafts and designs in Valmiki Ramayan require scrutiny. Pt. Ram Labhaya, Professor of Sanskrit, Khalsa College, Amritsar has, in a critically edited volume of Valmiki Ramayan, Ayodhya Kanda, given a long list of different types of smiths, artists and cottage-workers

(१) नानानं वा उ नो वियो वि व्रतानि जनानाम् ।

तक्षा रिष्टं हतं भिषग्ब्रह्मा सुवन्तमिच्छतीन्द्रायेवो परि स्त्रव ॥

(ऋ० १।११२।१)

(2) Indus Valley Civilisation—(Vedic Age, Vidya Bhawan Bombay)

भूरीणि भद्रा नयेषु बाहुषु वक्षःसु इवमा रभसासो अञ्जयः ।

अंसंवेताः पविषु क्षुरा अधि वयो न पक्षान्द्यनश्रियो विरे ॥

(ऋ० १।१६६।१०)

हिरण्य कर्णं मणिप्रीव मर्णस्तन्नो विश्वे वरिवस्यन्तु देवाः ।

अर्यो गिरः सद्य आ जग्मवीरोस्त्रादवाकन्तु भयेवस्मे ॥

(ऋ० १।११२।१४)

during the life-time of Kosala chief, Ram, son of Dashratha¹. In the Sabha Parva of the Mahabharat is found a description of several presents received by king Yudhishtira at the time of Rajsuya sacrifice. These presents included many beautiful woollen-clothings and other things of artistic designs². Such a description brings to our mind the existence of important crafts in the country in those days. May we not infer from Draupadi-Chir-Haran episode, besides its devotional and sen-

- (१) मणिकाराश्च ये केचिच्छत्रकाराश्च शोभनाः ।
 यस्त्रकर्मकृतश्चैव तथा वास्त्रोपजीविनः ॥
 मायूरिका स्तैतिरिकाश् छेदका भेदकास्तथा ।
 दन्तकाराः सुषाकारास्तथा दन्तोपजीविनः ॥
 स्वर्णकाराश्च विख्यातास्तथा कनकशोधकाः ।
 स्त्रापकाः स्तावका वंछाः शोण्डिकाः पोष्पिकास्तथा ॥
 रजकास्तन्नुवायाश्च सूतमागधवन्दिनः ।
 वाद्य वेत्रकाराश्च गान्धिकाः पाणिकास्तथा ॥
 प्रावारिकाः सूपकारास्तथा शिल्पोपजीविनः ।
 हृण्यकाश्च प्रख्यातास्तथा बृद्धमुपजीविनः ॥
 प्राकारिकास्तथा चैव तथा शास्त्रोपजीविनः ।
 स्पूलवायाः कांस्यकाराश् चित्रकाराश्च योधिनः ॥
 धान्यविक्रयिणश्चैव गन्धविक्रयिणस्तथा ।
 फलोपजीविनः सर्वे पुष्पमूलोपजीविनः ॥
 सूपकाराः स्थपत्यस्तक्ष्माणः कारपत्रिका ।
 श्रीरामेक्षास्तथा सर्वे इष्टकाकारकास्तथा ॥
 विषयमोदककाराश्च मालाकाराश्च शोभनाः ।
 श्रीरामेक्षास्तथा सब तथा मांसोपजीविनः ॥
 पांशिकाः पायकाश्चैव तथा चूर्णोपजीविनः ।
 कार्पासिका धनुष्काराः सूत्रविक्रयिणस्तथा ॥
 वस्त्रकर्मकृतश्चैव काण्डकारास्तथैव च ।
 शलाकाशल्पहर्तारो विषवन्छाश्च शोभनाः ॥
 भूतग्रहविधिनाश्च बालानां च चिकित्सकाः ।
 आरकूटकृतश्चैव ताम्रकारास्तथैव च ॥
 स्वस्तिकाराः कोशकारास्तथा भक्तोपजीविनः ।
 भञ्जकाराः सक्कुकारास्तथा बाटविकाश्च ये ॥
 क्षण्डकारास्तथा मूल्यास्तथा वाणिजकाश्च ये ।
 काचकाराश्छत्रकारास्तथा बोधकशोधकाः ॥
 क्षण्डसंस्थापकाश्चैव तथा ताम्रोपजीविनः ।
 श्रेणीमहतराश्चैव ग्रामघोषमहतराः ॥

(आ० रा० अयोध्याकाण्ड संपा० पं० रामलभाया)

- (२) और्णान् बालान् वार्षवंशाञ्जातरूपपरिष्कृतान् ।
 प्रावाराजिनमूल्याश्च काम्बोजः प्रबद्धो बहून् ॥
 (शेष अगले पृष्ठ पर)

timental importance, that Shri Krishna, a wealthy king of Dwarka as he was, must have supplied Draupadi a finely woven sari of good length to save her modesty in a critical position¹. Influence of foreign rule could not destroy completely this cultural heritage of the land and our traditions continued through the long course of history. Kautilya showed a great appreciation of the economic and social role of such arts and crafts and advocated the use of several methods for their organisation, development and taxation. A detailed description of several varieties of pearl-necklaces, as given by him in the Arthashastra, indicates the quality of craftsmanship of those days. He has pointed that 'Sirshaka, Upasirshaka, Prakandaka, Avaghataka and Taralpratibandha' are several varieties of pearl-necklaces². He has also discussed the several varieties of blankets and their artistic designs. Woollen blankets, as analysed by Kautilya, were of ten kinds — Kambala, Kauchapaka, Kulamitika, Saumitika, Turagastarana. Varnaka, Talichchhaka, Varavana, Paristoma and Samantabhadra. Of these, that which was slippery as a wet surface, possessed of fine hair was the best³. Other types of woollen blankets and cotton fabrics were known by the place

यवना हयानुपादाय पर्वतीयान् मनोजवान् ।
 आसनानि महार्हाणि कम्बलाश्च महाधनान् ॥
 नवान् विचित्रान् सूक्ष्माश्च पराध्यान् सुप्रदर्शनान् ।
 अन्यच्च विविधं रत्नं द्वारि तिष्ठन्ति वारिताः ॥
 प्रमाण रागस्पशद्वयं बाल्हीचीनसमुद्भवम् ।
 क्षीर्णं च राक्षुवं चैव कीटजं पट्टजं तथा ॥
 कुटीकृतं तथैवात्र कमलाभं सहस्रशः ।
 इलक्ष्यं वस्त्रमकार्पासमाविकं मृदु चाजिनम् ॥
 आसनानि महार्हाणि यानानि शयनानि च ।
 मणिकाञ्चनचित्राणि गजदन्तमयानि च ॥
 कवचानि विचित्राणि शस्त्राणि विविधानि च ।
 रथाश्च विविधाकाराञ्जातरूपपरिष्कृतान् ॥
 एतद् दत्त्वा महद् द्रव्यं पूर्वदेशाधिपा नृपाः ।
 प्रविष्टा यज्ञसदनं पाण्डवस्य महात्मनः ॥ (म० सभापर्व अ० ५१)

(१) याज्ञसेन्या वचः श्रुत्वा कुण्ठो गह्वरितोऽभवत् ।
 त्यक्त्वाशय्याऽऽसनं पद्भ्यां कृपालुः कृपयाभ्यगात् ॥
 कुण्ठं च विष्णुं च हरिं नरं च त्राणाय विक्रोशति याज्ञसेनी ।
 ततस्तु धर्मोऽन्तरितो महात्मा समावृणोद् वै दिविर्धः सुवस्त्रं ॥
 आकृष्यमाणे वसने द्रौपद्यास्तु विशास्पते । (म० सभापर्व, अ० ६८)

(२) शीर्षकमुपशीर्षकं प्रकाण्डकमवघाटकं तरलप्रतिबन्धं चेति यष्टिप्रदेशाः ॥
 (की० २।११)

(३) कम्बलः कीचपकः कुलमितिका सोमितिका तुरगास्तरणं वर्णकं तलिच्छकं बारबाणः
 परिस्तोमः समन्तभद्रकंचाविक्रतम् ॥ पिच्छलमाद्रिमिव च सूक्ष्मं मृदु च श्लेष्मम् ॥
 (की० २।११)

where they were prepared¹. According to Kautalya, there was to be a superintendent of weaving who was to employ qualified persons to manufacture threads, coats, cloths and ropes. Various kinds of garments, blankets, curtains, fibrous cloths, silk cloths, woollen cloths and cotton fabrics were manufactured². Goldsmiths prepared various kinds of garments e. g. ornaments from pure gold, hollow ornaments and setting gems in gold. Ornamental work was classified into three — Kshepana, Guna and Kshudra³. Panini also mentioned a list of cottage craftsmen which included potter, blacksmith, carpenter, miner, weaver, blanket-makers, leather workers and goldsmith⁴.

Technical Knowledge And Efficiency

The Atharva Veda gives us an idea that those engaged in the art of spinning and weaving knew their art well. It appears that the technical knowledge and degree of efficiency of the artisans and craftsmen was of a high order. They could spin non-breakable threads. The Rig, Yaju and Atharva Veda indicate the use of several instruments for purposes of spinning and weaving⁵. The art of painting, masonry and stone cutting was also efficiently known, because kings always liked good palaces, temples and monuments to be built for themselves. In the Sabha Parva of the Mahabharat, a description of the assembly

(१) संपुटिका चतुरश्रिका लम्बरा कटवानकं प्रावरकः सत्तलिकेत मगरोम ॥
माधुरमापरतंकं कालिङ्गकं काशिकं वाङ्गकं वात्सकं माहिषकं च कार्पासिकं श्रेष्ठमिति
(को० २।११)

(२) सूत्राध्यक्षः सूत्रवर्षवस्त्ररज्जुव्यवहारं तज्जातगुरुष्वैः कारयेत् ॥ श्रीमदुकूल क्रिमितान-
राङ्गवकार्पाससूत्रवानकमन्तिश्च प्रयुञ्जानो गन्धमात्यदानरन्ध्रं दक्षोपग्रहिकरारघयेत् ॥
वस्त्रास्तरणप्रावरणविकल्पानुत्थापयेत् ॥
(को० २।२३)

(३) विचितवस्त्रहस्तगृह्याः काञ्चनपृषतत्वष्टृतपनीयकारयेत् ॥ श्रेणो गुणः
क्षुद्रकमिति कमणि ॥ श्रेणः काचार्यणादीनि ॥ गुणः सूत्रवानादीनि ॥ घनं सुखिरं
पृषतावियुक्तं क्षुद्रकमिति ॥
(को० २।१३)

(4) India as known to Panini—Dr. V. S. Agrawal.

(५) यो विद्यात सूत्रं विततं यस्मिन्नोता प्रजाइमाः ।
सूत्रं सूत्रस्य यो विद्यात स विद्यावद्वाह्यं महत् ॥
अच्छिन्नं तनुमन सं तरेम । ततं तनुमन्वेके तरन्ति ॥ (अथर्व ६।१२।२)
अच्छिन्नं तनु पयसा सरस्वतीडा देवो भारती विश्वतूर्तिः (यजु० २०।४३)
पुमां एनं तनुत उत्कृणत्ति पुमान्वि तत्ने अधि नाके अस्मिन् ।
इमे मयूखा उप सेवुरु सवः सामानि चक्रस्तसराण्योतवे ॥
(ऋ० १०।१३०।२)

तत्र मेके यवती विरुपे अभ्याक्रामं वयतः षण्मयूखं ।

प्राप्या तंतू विस्तरते धत्ते अग्न्या नापे वृजते न गभ्यती अंतम ॥

(अथर्व १०।७।४२)

hall of king Yudhishtira convinces us of the technique of building¹. This technique had continued through the ages. The famous Som Nath temple, paintings, and carvings at Ajanta and Ellora are relics of the ancient technique. The iron pillar at Delhi is a marvel of metallurgical skill and is a clear proof of the perfection attained in iron smelting and welding by ancient Indians. Greek historian Herodotus believed that Indian steel was the best in the world. The famous diamond Kohinoor was fashioned in India. Chinese emperor Taitsung had sent his men to India to study the art of sugar making which had reached a high standard in this country. The Arthashastra of Kautilya provides a good picture of the technical knowledge possessed by an artisan, in a description of the quality of ornaments made from pure gold. It has been pointed out that such ornaments were to be uniform in colour, devoid of hollow bulbs, ductile, very smooth, free from alloys, pleasing when worn as an ornament, not dazzling though glittering, sweet in their uniformity of mass and pleasing to the mind and eyes².

State Patronage

Arts and Crafts flourished in ancient India mostly owing to state patronage. During the British regime the technical knowledge and the crafts began to languish due to lack of patronage by the state. There was a fear that some varieties of expert works might vanish with the passing away of the existing generation of craftsmen. The decline in the aesthetic sense of people was also responsible for the decay of arts. State encouragement, aid and provision of technical education was felt necessary for the revival of ancient art. From a Rig Veda hymn (Mandal 10 sukta 130), it appears that there were weaving schools and teachers used to give directions for different types of technology³. The Yajur Veda hymns indicate respect for different

- (१) तस्यां सभायां नलिनीं चकाराप्रतिमां मयः ।
 वंद्यं पत्रचित्तां मणिनालमयाम्बुजाम् ॥
 मणिरत्नचित्तां तां तु केचिदभ्यस्त्य पाषिषाः ।
 दृष्ट्वापि नाभ्यजानन्त तेऽज्ञानात् प्रपतन्त्युत ॥
 (महाभारत सभापर्व अ० ३)
- (२) समरागं समद्वन्द्वमशक्तं पृथक्तं स्थिरम् ।
 सुविमलमसंवीतं विभक्तं धारणे सुखम् ॥
 अभिनीतं प्रभायुक्तं संस्थानमधुरं समम् ।
 मनोनेत्राभिरामं च तपनीयगुणाः स्मृताः ॥
 (को० २।१३)
- (३) यो यज्ञो विद्वत्स्तन्नुभिस्तत् एकशतं देवकर्मभिरायतः ।
 इमे वयन्ति पितरो य आययुः प्र वयापि वयेत्यासते तते ॥
 (ऋ० १०।१३०।१)

types of artisans¹. In the Vana Parva of the Mahabharat, it is recorded that Nila, in his adversity, claimed maintenance from king Rituparna on the basis of the knowledge of many arts. King Rituparna agreed to this because he respected the artisan². Manu included the hand of an artisan in the list of those things which were to be regarded as always pure³. According to Kautilya, good artisans who showed their workmanship were to be rewarded by presentations, such as scents, garlands of flowers or any other prizes of encouragement⁴. The state of Uttar Pradesh has been famous for her traditions in handicrafts handed down from the Ramayan to the Mauryan, Gupta, Mughal and British periods. Several important centres of handicrafts like Moradabad, Benaras, Lucknow, Farrukhabad, Mirzapur and Mainpuri could keep up their traditional style due to the patronage of ancient Hindu and Mughal emperors. Indian workmen, their tastes and talents, were always respected by the rulers in this country.

If cottage industries and ancient crafts of the country are to be developed, it is necessary to deal with those deficiencies which have led to their decline. Such deficiencies have recently been—(a) lack of state patronage (b) lack of suitable organisation (c) lack of necessary finance. The schools of arts and crafts of different states have to be run on scientific lines to encourage the indigenous art and to provide inspiration and suitable opportunities to the promising artisans of the country. The state museums should not only accumulate art and craft objects, but should function in such a way as to inspire the present day artisans of India to produce and invent things of beauty for popularity inside and outside the country. In our country, it appears that cottage industries and handicrafts are going to stage a comeback because our national government are making efforts to

- (१) नमस्तक्षभ्यो रथकारेभ्यश्च वो नमो ।
 नमः कुलालेभ्यः कमरिभ्यश्च वो नमो ॥
 नमो निषादेभ्यः पुंजिष्ठेभ्यश्च वो नमो ।
 नमः श्वनिभ्यो मृगयुभ्यश्च वो नमः ॥ (यजु० १६।२७)

- (२) यानि शिल्पानि लोकेऽस्मिन् यच्चैवाग्यत् सुवृष्करम् ।
 सर्वं यतिष्ये तत् कर्तुं मृतुपर्णं भरस्व माम् ॥
 वस बाहुक भद्रं ते सर्वमेतत् करिष्यसि ।
 शीघ्रयाने सदा बद्धिध्रियते मे विशेषतः ॥
 (वन पर्वणि—नलोपाख्यान पर्व अ० ६७)

- (३) नित्यं शुद्धः कारुहस्तः पण्ये यच्च प्रसारितम् ॥ (मनु० ५।१२९)
 (४) बानकमग्निर्नाश्च प्रयुञ्जानो गन्धमात्यदानैरन्येऽद्योपग्राहिकं राशयन्तु
 (कौ० २।२३)

revive our ancient crafts for our own use and pleasure as well as to show to other countries the best of traditional Indian skills. Gandhiji was not against machinery as such but against the craze for machinery and totally opposed to it, when it mastered man and subdued his skill. He had, therefore, recommended industrialisation of India in his own sense of the term by revitalizing the villages and reviving indigenous arts and crafts. If we can correctly understand him in his gospel of hand-spinning and weaving, the day is not far off when even the most mechanised countries in the world will have to realise anew that in the matter of distinctiveness, durability and colourfulness human hands are still superior to machines. But this will all be possible when state patronage is available to the artisans.

Organisation And Finance

During Vedic days, the unit of organisation of cottage industry was the family, but later on and specially during Kautilya's time, artisans seem to have been organised under the guild system. Evils of factory industrialism were unknown in ancient India, but the spirit of cooperative activity, a social instinct in man, was a marked feature in social, political and economic life of the people. Manu and Yagnavalkya have referred to the organisation of such corporate life for administrative and economic ends. The Shreni, Gana, Kula, Puga, Grama, Nagar and Pura Janapada, as mentioned in the Smritis and the Mahabharat, had clearly a political as well as economic function in relation to industry and work of craftsmanship¹.

As regards finance, the Rig-Veda indicates credit facilities from indigenous money lender for the development of cottage spinning and weaving industry². Supply of necessary finance and raw materials by the state to the artisans has been referred to in the Sabha Parva of the Mahabharat. It appears that the state looked after the marketing facilities as well for the products of the artisans³. Kautilya has given elaborate rules for the or-

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| (१) | नृपेणाधिकृताः पूगाः श्रेणयोश्च कुलानि च ।
पूर्वं पूर्वं गृहं जयं व्यवहारविधौ नृणाम् । | (याज्ञवल्क्य २।३१) |
| (२) | त्वं सोम पणिभ्य आ वसु गव्यानि धारयः ।
ततं तन्तुमचिक्रवः ॥ | (ऋ० १।२२।७) |
| (३) | द्रव्योपकरणं किञ्चित् सर्वदो सर्वशिल्पिनाम् ।
चातुर्मास्यावरं सम्पदं नियतं सम्प्रयच्छसि ॥
कच्चिद्व्यागता दूराद् वणिजो लाभकारणात् ।
यथोक्तमवहार्यन्ते शूलकं शूलकोपजीविभिः ॥
(शेष अगले पृष्ठ पर) | |

ganisation of different types of artisans. Kautilya advised the king to treat the guilds of workmen with due consideration, because such guilds were multi-functional and were sources of wealth. He has pointed out that all artisans were to work as ordered and to finish their work in time. If they spoilt the work, not only were their wages forfeited but a fine, twice the amount of wages, was imposed. Weavers could increase the weight of the threads (supplied to them for weaving cloth) in proportion of 10 to 11 by soaking the threads¹. Many such detailed regulations have been discussed by Kautilya for the organisation of goldsmiths and other artisans. He has pointed out that those who give instructions to artisans, who could be trusted with deposits, who could plan artistic work and who could be relied upon by guilds of artisans could receive the deposits. These guilds of artisans were to receive their deposits back in times of distress². The master principle of all type of co-operation is unity whether applied to production, consumption, distribution or any other form of economic activity. This principle seems to have been applied in case of guilds of artisans in ancient India. Corporate enterprise plays an important role in the economic development of every country, because it is one of the well recognised and convenient methods of pooling resources. Dr. Sun Yat Sen was the first Chinese leader to suggest co-operative industrial activity to the people of China to escape from the terrible poverty in which most of them lived. The phenomenal growth of the Chinese Industrial Co-operatives, popularly known as 'Indusco', shows how efficient industrial production can be when carried on by small producers' co-operatives.

In our country also, organization of cottage industry on a nation-wide scale can only be through co-operative efforts and

कच्चित् ते पुष्पा राजन् पुरे राष्ट्रे च मानिताः ।

उपानयन्ति पण्यानि उपवाभिरवञ्चिताः ॥ (म० सभापर्व अ० ५)

(१) सौवर्णिकः पीरजानपदानां रूप्यसुवर्णमाविशनिभिः कारयेत् ॥

निविष्टकालकार्यं च कर्म कुर्युः अनिविष्टकालं कार्यापदेशम् ॥

(कौ० २।१४)

तन्तु वाया वशंकावशिकं सूत्रं वर्धयेयुः ॥ वृद्धिच्छेदे छेदद्विगुणोदण्डः ॥

सूत्रपरिवर्तने मूल्यद्विगुणः ॥ ऊर्णा तुलायाः पञ्चपलिको विसनमच्छेदो

रोमच्छेदश्च ॥ रजकाः काष्ठफलकदलक्षशिलासु वस्त्राणि नैनज्यः ॥

(कौ० ४।१)

(२) प्रवेष्टारस्त्रयस्त्रयो वाऽमात्याः कण्टकशोधनं कुर्युः ॥ अर्थप्रतीकाराः

काशगमितारः संशिक्षेतारः स्वचित्तकारवः श्रेणीप्रमाणा निक्षेपं गृह्णीयुः ॥

विपत्तौ श्रेणी निक्षेपं भजेत् ।

(कौ० ४।१)

many more effective and strong co-operative bodies with non-official and official support have to be organized and given necessary credit facilities for the organization of a huge production programme, and also facilities for getting quality raw materials. Production techniques have to be modernised and tools improved. Advantages of cheap power will go on multiplying as the big electricity schemes under way in the country start giving results; tools will have to be re-designed to fit in with this ready availability of power. Central organizations will also have to maintain research workshops where experiments on new tools and new designs can be carried on for the benefit of the production societies which should have ready technical assistance available for consultation and solution of their difficulties. The Central Co-operative Organization should also undertake marketing on behalf of the primary societies and purchase all standardized products when production is complete. This will allay the fright of the co-operative units who are apprehensive of selling their wares on their own account and of locking their small investments in unsold stocks. A co-ordinated and concerted effort on the lines mentioned will, we trust, result in rapid advancement of the objectives we have in view¹.

The Karve Committee recommended a development programme costing Rs. 260 crores for village and small scale industries under the 2nd five year plan. An All-India Handicrafts Board was setup in 1952 and is associated with the ministry of production, Government of India. The state governments, it is reported, have earmarked several crores of rupees for village and small industries in the 2nd five year plan. For carrying out the positive programmes for the promotion of village and small industries, a net work of organisations has been brought into existence by the central government during the past three or four years. These include (a) All India Khadi & village Industries board (b) All India Handicrafts board (c) All India Handloom board (d) Small scale industries board. It must be fully recognised that for the process of building up our ancient cottage industries, revival of arts and crafts, co-operatives have to be developed to the greatest extent possible. A combination of factors is required for establishing and maintaining such industrial co-operatives. The state governments have to undertake a measure of financial responsibility, as envisaged by the village and small scale industries committee, to provide a limited state

(1) (A.I.C.C. Economic Review)

guarantee with a view to maintain continuity of production. A Small beginning has been made to form artisans' co-operatives in pilot areas selected under the national extension and community development programmes. The decentralised pattern of organised and progressive planning of the nation's economy is likely to take us near our goal. The Small-Scale Industries Board has recommended an allocation of Rs. 232 crores by the Government for small-scale industries during the Third Plan period. There is evidence of great activity to make Indian Industry 'Productivity Conscious' and Industrial Co-operatives can play a very important role in rural and urban industrialisation. There is a great need for sound thinking on this issue so that India may revive its ancient glory in cottage industry products.

CHAPTER VII

FORESTRY, MINING AND MANUFACTURES

यस्यां वृक्षा वानस्पत्या ध्रुवास्तित्ठन्ति विश्वहा ।
 पृथिवीं विश्वधापसं धृतामच्छाववामसि ॥
 निधिं विश्रती बहुधा गुहा वसु मणिं हिरण्यं पृथिवी ददातु मे ।
 वसूनि नो वसुधा रासमाना देवी दधातु सुमनस्यमाना ॥
 शिला भूमिरश्मा पांसुः सा भूमिः सम्धृता धृता ।
 तस्यं हिरण्यवक्षसे पृथिव्यां अकरं नमः ॥ (अथर्व १२।१)
 आकरप्रभवः कोशः कोशादृण्डः प्रजायते ।
 पृथिवी कोशदण्डाभ्यां प्राप्यते कोशभूषणा ॥ (को० २।१२)

Forests—National Assets

The primary industries of a country are Fisheries, Forestry, Agriculture and Mining. Agriculture is still one of the most important industries of our country and a separate chapter has been assigned to discuss its problems. Probably it was due to abundance of food obtained from agriculture and animal husbandry and the religious outlook of the people in ancient India, that Fishing could not develop as an independent industry on a large scale. Stray references have been given by Manu and Kautilya to fishing and problems of fishermen. Manu has condemned eating of fish, but he makes an exception for certain kinds of fish to be accepted for purposes of sacrifice¹. Kautilya has referred to the rate of tax that fishermen were to pay to the superintendent of ships². Fishing is an important commercial industry now and the development of fisheries programme will be expanded during the second five year plan. The schemes of the Ministry of Food and Agriculture envisage the expansion of off-shore and deep-sea fishing. Scarcity of food and the needs of increasing population of the country have compelled the government to explore all possibilities of fisheries

(१) यो यस्य मांसमश्नाति स तन्मांसाद उच्यते ।
 मत्स्यादः सर्वमांसादस्तस्मान्मत्स्यान्विषजंयेत् ॥

पाठीनरोहितावाद्यो नियुवती हृष्यकश्यपोः ।
 राजीवान् सिंहतुण्डाश्च सशल्काश्चैव सर्वशः ॥ (मनु० ५।१५-१६)

(२) मत्स्यवत्सका नौकाहाटकं षड्भागं दद्याः ॥ (को० २।२८)

development. In the maritime states, special emphasis will be placed on the mechanisation of fishing crafts. The plan, it is reported, provides about Rs. 12 crores for the development of fisheries.

Nearly one-fourth of the land surface of the Earth is covered with forests. Their distribution is essentially climatic. Forests have direct and indirect utilities. They render the climate more equable and contribute to increase rainfall. They increase the fertility of the soil. Besides providing scope for the grazing of cattle, they serve as a good source of revenue to the state. Scientific preservation of forests was one of the chief characteristics of ancient Indian civilisation. The philosophy of the Aranyakas and of the Upanishads must have been developed in the solitude and grandeur of large and well-kept forests. A very interesting and eventful part of the life of our national heroes like Rama, Krishna and Pandava princes is associated with their wanderings in the forests. The names of Dandaka, Vrindavan, Madhavana, Khandava, Dwait, Kamyaka forests are so popularly known to the people of India from the Epics¹. The Naimisharanya is famous for the great assemblage and performance of sacrifices by thousands of sages in ancient India. The diversity of Indian climate in different parts of the country must have been responsible for the growth of different types of trees in different forests.

Kautalya, in Book II Chapter XVII of his Arthashastra, has pointed out that the superintendent of forests' produce was to

(१) रामस्तु पुनराशङ्क्य पौरजानपदागमम् ।
प्रविशेत् महारण्यं शरभङ्गाधमं प्रति ॥
सत्कृत्य शरभङ्गं स दण्डकारण्यमाश्रितः ।
नदीं गोदावरीं रम्यामाश्रित्य न्यवसत् तदा ॥

(म० वनपर्वणि—रामोपाख्यानपर्वं अ० २७७)

ह्रदे नीपवने तत्र क्रीडितं नागमूर्धनि ।
कालियं शासयित्वा तु सर्वलोकस्य पश्यतः ।
विजहार ततः कृष्णो बलदेवसहायवान् ॥ (म० सभापर्वं अ० ३८)
इदमिन्द्रः सदा वाचं स्वाण्डवं परिरक्षति ।
न च शक्नोम्यहं दग्धुं रक्ष्यमाणं महात्मना ॥

(म० आदिपर्वणि—स्वाण्डवदाहपर्वं, अ० २२२)

इदं द्रुतवनं नाम सरः पुण्यजलोचितम् ।
बहुपुष्पफलं रम्यं नानाद्विजनिषेधितम् ॥ (म० वनपर्वं, अ० २४)
पुनर्वहुमगं रम्यं काम्यकं काननोत्तमम् ।
मरुभूमेः शिरः स्थानं तृणबिन्दुसरः प्रति ॥
तत्रेभां वसति शिष्टां बिहृता रमेमहि । (म० वनपर्वं, अ० २५८)

collect timber and other products of forests by employing those who guarded productive forests. He was not only to start productive works in forests, but also to fix adequate fines and compensations to be levied on those who caused any damage to productive forests except in calamities. A long and detailed list of the important trees of forests yielding commercial timber, many medicinal and poisonous herbs, roots, skins, bones, horns, hoofs of many wild animals roaming in the forests has been given by Kautilya. All these forest-products were considered to be of great commercial value and their scientific classification and utilisation proves beyond doubt that the art of forestry was well known in ancient India. Kautilya concludes the chapter by noting that the Superintendent of Forest produce was to carry on, either inside or outside the capital city, the manufacture of all kinds of articles which were necessary for life or for defence of forts¹.

It appears, therefore, to be clear that during the course of history, thinkers in India have always been aware of the important role that forests play in influencing the social, political and economic life of the people. Forests are a renewable national asset and capable of yielding, under proper scientific management, not only a steady annual income but also a variety of products essential for human welfare. They should be treated as capital which has been handed down to us in trust by our ancestors and which we should pass on intact, if possible improved, to future generations. Forests in India these days, it is estimated, cover about 22 percent of the total geographical area of the country as against the proportion of 33 percent recommended in government's resolution on forest policy. Sustained efforts have, therefore, to be made for the extension of forests and for raising timber and industrial plantations for meeting national requirements. The Forest Research Institute

(१) कुप्याध्यक्षो ब्रह्मवनपालः कुप्यमानाययेत् ।

ब्रह्मवनकर्मन्तिश्च प्रयोजयेत् ॥

ब्रह्मवनच्छिन्नां च देयमत्ययं च स्थापयेद्वन्यापद्भ्यः ॥ कुप्यवर्गः शाक-
तिनिशथन्वानार्जुनमषकतिलकसालशिशपारिमेव राजाइनशिरीष क्षदि-
रसरल तासर्जदिव कर्ण सोमवल्क कशाक्ष प्रियक धवादिः सारदावर्गः ॥
उदजविमियचापवेणुबंशातीनकण्टकभातल्लुकादिवेणुवर्गः ॥

क्षेत्रक्षीकवल्लीवाग्रीश्यामलतानागलतादिवल्लीवर्गः ॥ मारुती
दूर्वाकशणगवेषुका तस्यादिवल्क वर्गः ॥ मृन्ज बल्बजादि रज्जु भाण्डम् ॥
तालीतालभूजीनां पत्रम् ॥ किशुककुसुम्भ कुङ्कु मानां पुष्पम् ॥

बहिरन्तरद्वय कर्मन्ता विभक्तताः सर्वभाण्डिकाः ।

माजीवपुरस्कार्याः कार्याः कुप्योपजीविना ॥ (को० २।१७)

at Dehradun provides training for the forest services of India and carries on research in forestry and forest products. There is, however, a considerable scope for improvement in forest research for commercial and industrial interest of the country in particular and national welfare in general. A stage has been reached where forestry should no longer be regarded as a hand-maid of agriculture but as a necessary complement to it¹. The Van-Mahotsava scheme started by our national government should be accepted by the people in its correct significance. We can draw some inspiration in this field of planting trees in the rural and urban areas of the country by studying what the great hero Shrikrishna had done in case of Dwarika².

Minerals In National Economy

A careful husbanding of mineral resources and the rate at which mineral development takes place are among the principal indications of a country's economic development. The Industrial Revolution which gave Great Britain, for nearly a century, an almost undisputed predominance as a manufacturing country and exerted a great influence on the entire way of life of the English nation was made possible by the presence and exploitation of important minerals in that country. America is the richest country in the world these days because of the abundance of mineral wealth. The Union of Soviet Russia is proving a match to America by a scientific utilisation of the treasures hidden underneath the Mother Earth. Kautalya believed that mines were the source of treasury; from treasury came the power of government; and the earth whose ornament is treasury could be acquired by means of treasury and the army. The Yujar Veda directs for a careful utilisation of the important materials and minerals for human welfare³. The Bhumi Sukta of the Atharva Veda gives us an idea that the Mother Earth contains all the important materials and minerals inclu-

(1) Five Year Plans.

(२) ये च हृमवता वृक्षा ये च नन्वनजास्तथा ।
आहृत्य यदुसिहेन तेऽपि तत्र निवेशितः ॥
ये च नन्वनजा वृक्षा ये च चंद्ररथे वने ।
सर्वे ते यदुनाथेन समन्तात् परिरोपिताः ॥

(म० सभापर्व, अ० ३८)

(३) अश्वा च मे मत्सिका च मे गिरयश्च मे पर्वताश्च मे सिकताश्च मे
वनस्पतयश्च मे हिरण्यं च मेऽयश्च मे इषामं च मे लोहं च मे सीसं च मे
अणु व मे यज्ञेन कल्पन्ताम् ॥

(यजु० १८।१३)

ding precious metals like gold, but it is for mankind to make correct and constructive use of the same¹.

As minerals form the basis of modern industry in peace and war and as they are wasting assets, it is necessary to adopt a policy of co-ordinated, orderly economic exploitation. The key-note of such a policy should be conservation and economic working. The result of reckless working has been that some of the smaller coalfields of Europe have been worked out, while in others it has become necessary to sink much deeper shafts at an increasing cost. India has the basic resources—coal and iron ore needed for industrial development, but there are only a few surpluses and quite considerable deficiencies in minerals like ores of copper, tin, lead, zinc, sulphur, and petroleum. Dr. J. C. Ghosh, a member of the planning commission, is of the view that India has reserves of uranium ore which might give 15000 tons of uranium metal on extraction. If uranium and thorium reserves of India are utilised in breaker atomic reactors, she would have enough energy equal to that of the U.S.A. for two hundred years. The exploration and development of the country's mineral resources with the help of Geological Survey might give more precise information on known resources and perhaps make a few important discoveries.

Mining Operations

For Proper conduct of mining operations in a country, reliable data on reserves and a systematic investigation of the mineral deposits is very essential. Statistics regarding various facts and aspects of mineral economics have to be collected. There has to be a scientific survey of mineral deposits and their proper exploitation. In the Vana-Parva of the Mahabharat, a description of the Gandhamadan Parvat as well as the Mainak Parvat, suggests the existence of important minerals in the mountainous areas². Capt. Uma Kant Shukla, a mountaineer,

- (१) विश्वम्भरा वसुधानो प्रतिष्ठा हिरण्यवक्षा जगतो निवेशनी ।
वद्वानरं बिभ्रती भूमिरग्निमिन्द्रावभा द्रविणे नो दधातु ।

(अथर्व० १२।१)

- (२) ततः किम्पुष्पावासं सिद्धिचारणसेवितम् ।
वद्वानुहंस्टरोमाणः पर्वतं गन्धमादनम् ॥
भास्कराभाः प्रभाभिश्च शारदाभ्रघनोपमाः ।
शोभयन्ति महाशैलं नानारजतघातवः ।
ववचिदञ्जनवर्णाभाः ववचित् काञ्चनसन्निभाः ॥
शेष अगले प्रच्छ पर

who claimed to have discovered the 'Sumeru' or Golden Peak in 1952, had suggested to the Union Govt. to send their Films Division to prepare colourful movies of beauty spots and important peaks of the Himalayas. Capt. Shukla who returned after visiting the Himalayan districts in search of peaks mentioned in the Vedic and post-Vedic literature like Brahmins, Upnishads and Epics claimed to have spotted another peak called 'Swaragpuri' at an altitude of 24,000 ft. He had pointed out that the Union Govt. would be doing a great service to the rich cultural heritage of India if they portrayed and preserved the Himalayan peaks and site of cultural and mineral value by the help of the Films Division. The recent gas find at Jawala Mukhi would be helpful in exploring the potential mineral wealth in mountainous regions of our country.

The essentials of a sound Mineral Policy for conduct of mining operations and manufacture include the employment of qualified technical personnel, stoppage of selective mining of high grade minerals alone. Such a policy should lay down limits of economic holding for different classes of minerals and conversion of minerals into finished or semi-finished products for use inside the country or for purposes of export. Among the ancient thinkers on mining industry, Kautilya has given the most detailed information on mining and manufactures. In Book II chapter XII of the Artha Shastra, he has pointed out that with those possessed of the knowledge of the science dealing with copper and other minerals, experienced in the art of distillation and condensation of mercury and of testing gems, aided by experts in mineralogy and equipped with mining labourers and necessary instruments, the superintendent of mines was to examine mines which appeared to have been once exploited or which might have been newly discovered on plains or mountain slopes possessing mineral ores, the richness

धातवो हरितालस्य क्वचित्द्विङ्गलकस्य च ।
 मनः शिलागृहाश्चैव सन्ध्याभ्रनिकरोपमाः ॥
 शशलोहितवर्णाभाः क्वचिद्गैरिकधातवः ।
 सितासिताभ्रप्रतिमा बालसूयंसमप्रभाः ॥
 एते बहुविधाः शैलं शोभयन्ति महाप्रभाः ।
 आलोकयन्तो मनाकं नानाद्विजगणायुतम् ।
 हिरण्यशिलरं चैव तच्च बिन्दुसरः शिवम् ।
 नानाधातु समाकीर्णं विविधोपलभ्यतम् ।
 अस्वारण्यस्य महतः केतुभ्रतमिबोत्थितम् ॥

of which could be ascertained by weight, depth of colour, piercing smell and taste¹.

Kautalya has given clear indications for geologists to ascertain the deposits of gold, silver, copper and other important minerals. He has pointed out that the heavier the ores, the greater should be the quantity of metal in them. He has written that liquids which ooze out from pits, caves, slopes or deep excavations of well-known mountains ; which have the colour of the fruit of rose apple, of mango ; which are as yellow as ripe turmeric, sulphurate of arsenic, honeycomb and vermilion, which are as resplendent as the petals of a lotus, or the feathers of a peacock or parrot ; which are adjacent to any mass of water or shrubs of similar colour ; which are greasy, transparent and very heavy are ores of gold. Likewise liquids which when dropped on water, spread like oil to which dirt and filth adhere and which amalgamate themselves more than cent per cent with copper or silver. Of similar appearance as the above but of piercing smell and taste is bitumen². Those ores which are obtained from plains or slopes of mountains ; which are either yellow or as red as copper or reddish yellow ; which are disjointed and marked with blue lines ; which have the colour of black beans, green beans and sesamum, which are marked with spots like a drop of curd and resplendent as turmeric, yellow myrabolan, petals of a lotus, aquatic plant, the liver or the spleen ; which possess a sandy layer within them and are marked with the figures of a circle or a svastik ; which contain globular masses and which when roasted do not split, but emit much foam and smoke are the ores of gold and are used to form amalgams with copper or silver³. Those Ores

- (१) आकराध्यक्षः शूलवधातुशास्त्ररसपाकमगिरागजस्तज्जसक्तो वा तज्ज्जातकर्मकरोपकरणसंपन्नः किट्टभूषाङ्गार भस्मलिङ्ग वाऽऽकरं भूतपूर्वमभूतपूर्ववा भूमि प्रस्तररसधातुमस्यर्थं वर्णगौरवमुपगन्धरसं परीक्षत ॥ (को० २।१२)
- (२) पर्वतानामभिज्ञातोद्देशानां बिलगृहोपत्यकालयनिगृह्णातेष्वन्तः प्रस्थग्विनो जम्बूवृक्षतालफलपर्ववहरिद्राभेदेहरितालमनःशिलाक्षोद्रहिङ्गलुक पुण्डरीक शुकमयूरपत्र वर्णाः सवर्णोदकोवर्षो पर्यन्तादिष्वकणाविज्ञा भारिकाश्च रसाः काञ्चनिकाः ॥ अप्सु निष्ठयतास्तंलवद्विसर्पिणः पङ्कमलग्राहिणश्च तान्नश्यन्ति शतावुपरि वेद्वारः ॥ तत्प्रतिरूपकमुपगन्धरसं शिलाजतु विद्यात् ॥ (को० २।१२)
- (३) पीतकास्ताम्रकास्ताम्रपीतका वा भूमिप्रस्तरधातवः प्रभिन्ना नीलराजोवन्तो मृद्गमावकृतसरवर्णा वा दधिबिन्दुपिण्डचित्रा हरिद्रा हरीतकीपद्मपत्र शैवलयकृतप्लीहानवद्यवर्णा भिन्नाश्चञ्च बालकालेसाविन्मु स्वस्तिकवन्तः सगुलिका अविष्मन्तस्ताप्यमाना न भिद्यन्ते बहुकोनयूमाश्च सुवर्णधातवः प्रतीवार्थास्ताम्ररूपवेचनाः ॥ (को० २।१२)

which have the colour of a conch shell, camphor, alum, butter, a pigeon, turtle dove, Vimalaka or the neck of a peacock; which are as resplendent as opal, agate, cane-sugar and granulated sugar; which has the colour of the flower of kovidara, of lotus, patali, of Kalaya, of kshauma and of atasi; which may be in combination with lead or iron; which smell like raw meat, are disjoined grey or blackish white, and are marked with lines or spots; and which, when roasted, do not split, but emit much foam and smoke are silver ores¹. Those ores which are obtained from plains or slopes of mountains; and which are heavy, greasy, soft, tawny, green, dark bluish-yellow, pale-red or red are ores of copper. Those ores which have the colour of kakamechaka pigeon, or cow's bile, and which are marked with white lines and smell like raw meat are the ores of lead. Those ores which are as variegated in colour as saline soil or which have the colour of a burnt lump of earth are the ores of tin. Those ores which are of orange colour or pale-red or of the colour of the flower of sinduvara are the ores of tikshana². Those ores which are of the colour of the leaf of kanda or of the leaf of birch are the ores of Vaikrantaka. Pure, smooth, effulgent, sounding, very hard and of little colour are precious stones³.

As regards the importance of precious metals, Kautilya seems to be in line with the Mercantilists. The typical mercantilist thought that the precious metals—gold and silver were the most desirable forms of wealth in preference to all others goods and services. All economic activities in a mercantilist state were to be so organised as to increase the amount of gold and silver in the country. Their slogan was 'more gold, more wealth, more power'. Probably it was because of this that Kautilya gave good attention to the analysis, classification and processing of these important precious metals. In

- (१) शङ्खकूर्पूरस्कटिकनवतीतकपोतपारावतबिमलकमयूरघोषावर्णाः सस्यकमोमेवकगुड-
मस्यण्डिकावर्णाः कोविदारपद्म पाटलीकलायक्षीमातसी पृष्पवर्णा ससीसाः
साञ्जनाः बिस्त्राभिन्नाः श्वेताभाः कृष्णाः कृष्णाभाः श्वेताः सर्वे वा लेखाबिम्ब-
चित्रा मूढवो ध्यायमाना न स्फुटन्ति बहुफेनधूमाश्च रुप्यधातवः । (को० २।१२)
- (२) भारिकः स्निग्धो मृदुश्च प्रस्तरधातुर्भूमिभागो वा पिङ्गलोहरितः पाटलो लोहितो
वा ताम्रधातुः ॥ काकमेचकः कपोतरोचनावर्णः श्वेतराजिनद्वो वा बिस्त्रः
सीसधातुः ॥ ऊषरकर्बुरः पद्मलोष्ठवर्णो वा त्रपुधातुः ॥ कुरुम्बः पाण्डुरोहरितः
सिन्धुवारपृष्पवर्णो वा तीक्ष्णधातुः ॥ (को० २।१२)
- (३) काकाण्डभृजपत्रवर्णो वा वक्रन्तकधातुः ॥ अलुक्कस्निग्धः सप्रभो घोषवान्
शीतस्तीव्रस्तनूरागश्च मणिधातुः ॥ (को० २।१२)

Book II chapter XIII of his Arthashastra, he has pointed out that Jambunada, that which is the product of river Jambu ; Satakumbha, that which is extracted from the mountain of Satakumbha ; Hataka, that which is extracted from the mines known as Hataka; Vainava, that which is the product of the mountain Venu and Sringasuktija, that which is extracted from Sringasukti are the varieties of gold, that which is of the colour of the petals of lotus, ductile, glossy, incapable of making any continuous sound and glittering is the best; and that which is reddish-yellow is of medium quality; and that which is reddish of low quality¹. Tuthodgata, that which is extracted from the mountain Tuttha; Gaudika, that which is the product of the country known as Gauda ; Kambuka, that which is extracted from the mountain Kambu, and Chakravalika that which is extracted from the mountain Chakravala are the varieties of silver. Silver which is white, glossy and ductile is the best; and that which of the reverse quality is bad².

Technique of Refining Metals

Kautalya has also discussed the methods by which impurities of ores, whether superficial or inseparably combined with them, can be got rid of and the metal melted. This could be possible when the ores are chemically treated with alkalis, and are mixed or smeared over with the mixture of Rajavriksha, Vata and Pilu together with cow's bile and the urine and dung of a buffalo, an ass and an elephant. Kautalya has pointed out that metals are rendered soft when they are treated with the powder of kandali and vajrakanda together with the ashes of barley, black beans, palasa and pilu or with the milk of both the cow and the sheep. Whatever metal is split into a hundred thousand parts is rendered soft, when it is thrice soaked in the mixture made up of honey, madhuka, sheep's milk, sesamum oil, clarified butter, jaggery, kinva and mushroom³. Permanent softness is also attained when the metal is

- (१) जाम्बूनवं शातकुम्भ हाटकं वणवं शृङ्गिशुक्तिजं जातरूपं रससिद्धमाकरोद्गतं च सुवर्णम् ॥ किञ्जल्कवर्णं मृदु स्निग्धमनादि भ्राजिष्णु च श्रेष्ठम् ॥ रक्तपीतकम मध्यमम् ॥ रक्तमवर्णम् ॥ (को० २।१३)
- (२) तुत्थोद्गतं गौडिकं काम्बुकं चाक्रवालिकं च रुप्यम् ॥ इवेतं स्निग्धं मृदु च श्रेष्ठम् ॥ विपर्यये स्फोटनं च दुष्टम् ॥ (को० २।१३)
- (३) तेषामशुद्धा मृदुगर्भा वा तीक्ष्णमूत्रक्षारभाविता राजवृक्षवट पीलुगोपित्तरोचना महिषखरकरभमूत्रलण्डपिण्ड वद्धास्तत्प्रतीवापास्तबलेषा वाविशुद्धाः स्रवन्ति ॥ यवमाषतिलपलाश पीलुक्षारगोक्षीराजक्षीरं वा कदली वज्रकन्दप्रतीवापो मार्बवकरः ॥ मधुमधुकमजापयः सतलं घृतगडिकण्वयुतं सकन्दलीकं ॥ यदपिशतसहस्रधा विभिन्नं भवति मृदु त्रिभिरेव तन्निष्पेकः ॥ (को० २।१२)

treated with the powder of cow's teeth and horn¹. It is for the experts of mineralogy and metallurgy to critically examine the utility and suitability of the methods, alkalis as well as chemicals suggested by Kautilya for the process of refining metals. It is doubtful whether the manner and method of the treatment of metals for refining, as mentioned above, would be regarded as scientific in the latter half of the twentieth century when science and technique have progressed wonderfully, but the methods must have been regarded scientific in the days of Kautilya and give us a clue of ancient technology. They can still be used with advantage if improved upon to satisfy the present day needs of mining industry of the country.

Manufacturing Process

The Superintendent of metals was to carry on the manufacture of copper, lead, tin, vaikranta, brass, bronze, Sulphurate of arsenic and also of other commodities that could be prepared from them. The superintendent of ocean mines was to collect the products of ocean mines and also to regulate commerce in them. The superintendent of salt was to collect in time both the money rent and the quantity of shares of salt due to the government². Kautilya has also directed that the yield of mines was to be utilised for the development of other minerals in the country and also that commerce in commodities manufactured from mineral products was to be centralised. The government was to keep both mining and commerce in minerals as a state monopoly³. The high lights of the latest Industrial Policy of the government of India, as stated on 30th April, 1956, seem to be similar with the philosophy of Kautilya in regard to the ownership and working of mining industry of our country.

(१) गोदन्त भृङ्गप्रतीवापो मृदुस्तम्भनः (को० २।१२)

(२) लोहाध्यक्षस्तान्नीसोऽत्र पुं वं कुन्त कारकूट वृत्तकंसताललोहकर्मन्तान् कारयेत् ॥
लोहभाण्डव्यवहारं च ॥ अन्यध्यक्षः शङ्खवज्रमणिमृक्ताप्रवालक्षार
कर्मन्तान्कारयेत् ॥ पणनव्यवहारं च ॥ लवणाध्यक्षः पाकमृत्तं लवणभागं प्रकथं च
ययाकालं संगृह्णीयात् ॥ (को० २।१२)

(३) धातुसमुत्पिष्टं तज्ज्ञातकर्मन्तिषु प्रयोजयेत् ॥
एवं मूल्यं विभागं च ध्याजो परिषमत्ययम् ॥
शुल्कं वंशरणं वण्डं रूपं रूपिकमेव च ॥
स्निग्धो द्वावशविधं धातुं पण्यं च संहरेत् ॥
एवं सर्वेषु पण्येषु स्थापयेन्मुखसंग्रहम् ॥ (को० २।१२)

In this brief survey of minerals and their exploitation from the Vedic days to the period of Kautilya's Arthashastra, a notable feature is that most of the industrial ores have been mentioned, but no reference is given to any of the Industrial fuels like coal, petroleum and natural gas. In the Mahabharat, we find reference to important metals and similarly in the Shukra Niti, seven important metals have been referred to but no mention is made of coal and petroleum¹. Coal is regarded as the mother of Industry these days and petroleum is said to be the king of fuels. Lack of information and discussion on important fuels like coal and petroleum may be due to the fact that Industry was carried on a cottage basis those days. Conditions are changed now and Industrial fuels have become indispensable for large scale manufacture of the modern times. Our national government have laid the foundations of a sound mineral policy by the expansion of the Geological Survey of India for implementing a programme of mineral expansion and developments. The establishment of a bureau of mines for securing co-ordinated development of the country's mineral reserves with due regard to their conservation is of great importance. The mines and minerals (Regulation and Development) Act of 1948 gives power of regulation to the central government. Under this Act rules have been framed for the issue of prospecting licences and mining leases for (a) natural gas and petroleum and (b) all other minerals, During the second plan it is proposed to organise intensive survey of the country's mineral resources. The exploration and development of the Country's oil resources is one of the important tasks in the second Five Year Plan and may satisfy the growing needs of the country which are now more extensive and different than in the days of Kautilya.

(१) सुवर्णस्य मलं रूप्यं रूप्यस्यापि मलं त्रपु ।
 त्रयं त्रपुमलं सीसं सीसस्यापि मलं मलम् ॥ (म० उद्योगपर्व, अ० ३९)
 सुवर्णरजतं ताम्रं चङ्गं सीसं च रङ्गकम् ।
 लोहं च धातवः सप्तह्येषामग्येतुसंकराः ॥ (शु० नी० ४।१९९)

CHAPTER VIII

LABOUR PROBLEMS

यो जागार तमूचः कामयन्ते यो जागार तम् सामानि यन्ति ।

यो जागार तमयं सोम आह तवाहमस्मि सख्ये ग्योकः ॥

(ऋ० ५।४४।१४)

कुर्वन्नेवेह कर्माणि जिजीविषेच्छतः समाः ।

एवं त्वयि नान्यपेतोऽस्ति न कर्म लिप्यते नरे ॥ यजु० ४०।२)

आरभेतैव कर्माणि भ्रान्तः भ्रान्तः पुनः पुनः ।

कर्माण्यारभमाणं हि पुरुषं धीनिषेवते ॥ (मनु ९।३००)

अनिर्वेदः धियो मूलं लाभस्य च शुभस्य च ।

महान् भवत्यनिर्विण्णः सुखं चानन्त्यमश्नुते ॥

(म० उद्योगपर्व, अ० ३९)

Incentives To Labour

Labour problems are of a dynamic character and change in nature and scope from generation to generation. The incentives to labour also differ from age to age and their growing complexity baffles not only laymen, but thinkers and technicians as well. In Europe, it was in the theological writings of John Calvin (1509-1564) that the religious incentive to labour reached its most compelling form. Calvin gave work its moral force and labour became a Christian obligation. To labour industrially in a calling was regarded as God's command to man¹. In our country, this philosophy of work is older than that of the West. The Vedic hymns and many other references in our ancient literature emphasize a life of energetic action for all. A Vedic song in the Aiteray Brahman, which is reported to have incited Rohit to keep on moving and get success, is a lesson for us to be up-and-doing². In the Vana Parva of the Mahabharat, the genius of

(1) Basic Teachings of the Great Economists—John W. Mcconnell.

(२) चरंवेति-चरंवेति

नाना भ्रान्ताय धीरस्ति इति रोहित शुभ्रम् ।

पापो नष्टद्वरो जन इन्द्र उच्यते सखा ॥

कलिः शयानो भवति संजिहानस्तु द्वापरः ।

उत्तिष्ठस्त्रेता भवति कृतं सम्पद्यते चरन् ॥

चरन् वै मघु विन्दति चरन् स्वाहुमुदुम्बरम् ।

सूर्यस्य पदय ध्वजाय यो न तन्वयते चरन् ॥

चरंवेति-चरंवेति

चरंवेति-चरंवेति

चरंवेति-चरंवेति

sage Vyas places before us a philosophy of vigorous action to reach the desired goal¹. The philosophy of 'Karma-Yoga' of the Bhagwat Gita is highly ennobling for national activity. The real 'Yoga' according to Gita is efficiency in one's work². Incentives to work, financial as well as non-financial, are wanting in modern industry in India and in the absence of such incentives, workmen regard work as a painful necessity. In the scientific management of our industry, mental revolution on the part of workers is most essential. Besides financial incentives, they have to be imbibed with the gospel of hard work and to regard work as worship. It must be conceded that managerial inefficiency and lack of stamina on the part of workers, due to mal-nutrition, play their roles in India's poor industrial output, but many a time sheer laziness has an equal responsibility.

The Indian Renaissance which culminated in the regaining of independence must not blind us to the fact that we are still far behind other nations of the world in our agricultural and industrial output. Unless we work hard in all fields of activity, our freedom may be short-lived. When Russians decided to industrialise their country with all the handicaps, how they did it is really a miracle. All people were induced or forced to work hard to produce whatever they could. Work in U.S.S.R. became a matter of Honour, Glory, Valour and Heroism, and whatever the faults and failures which marked the history of their projects, the success achieved can be described as nothing less than amazing. If we combine all these things together and start in full swing, we can change our country in the shortest possible period. The Prime Minister of our country has many a time declared, "To-day is the time for work in this nation. For this generation of ours is condemned to hard labour. No man ever died of hard work if he is working in a good cause, if his spirit is in it, but people do die of ennui and other things. The 'Karmayogi' who puts his hand to work will persist in it, refusing to be discouraged by difficulties however immense and

- (१) कर्म खल्विह कर्तव्यं जानतामित्रकशनं ।
अकर्मणो हि जीवन्ति स्यावरा नेतरे जनाः ॥
अकर्मणां वै भूतानां वृत्तिः स्यान्न हि काचन ।
तदेवाभिप्रपद्यते न विहन्यात् कदाचन ॥

(महा० वनपर्व, अ० ३२)

- (२) नियतं कुरु कर्म त्वं कर्म ज्यायो ह्यकर्मणः ।
शरीरयात्रापि च ते न प्रसिद्ध्येदकर्मणः ॥
कर्मणं हि संसिद्धिमास्थिता जनकादयः ।
लोक संग्रह मेवापि संपश्यन्कर्तुमर्हसि ॥
तस्माद्योगाय युज्यस्व योगः कर्मसु कौशलम्

(गीता ३।८)

(गीता ३।२०)

(गीता २।५०)

apparently insuperable. This is Dharma, the national religion which we may believe to be universal. The religion of India is nothing if it is not lived. It has to be applied not only to the life of an individual, but to the whole of social, political and economic life of the country". The real heroes of the modern age in India should be those who put their might to the wheels of industry and keep them moving. Unless a recognition of the imperative need for productive labour is instilled into the consciousness of every Indian, the bright future we all look forward to is very far indeed.

Dignity Of Labour

The basic trouble in India to-day is the lack of appreciation of the simple fact that we cannot get out of a country's resources more than we put into them and the only thing that can be put in is work. In the final analysis, everything of value to mankind can be expressed as work. The wheat and rice that feed us have to be sown in the soil that the farmer has ploughed. They must be tended during growth, harvested, processed and transported to the consumer. If these operations are inefficiently carried out, labour is wasted, and thus grain is scarce and expensive. The idea that some kind of labour is of greater significance than other is as old as Aristotle. The mercantilists and the physiocrats differed on this issue. The concept broadened at the hands of Adam Smith and the modern standpoint is that all whose labours satisfy wants should be regarded as productive labourers. Food, clothing, houses, public buildings, shops, factories, schools, railways and other amenities of life we need will only come into being by the sweat of our brows. The sanskrit saying that there is no taste without sweat and no rest without labour is perfectly correct¹.

Thomas Carlyle in his essay on 'Dignity of labour' writes, "All work is noble ; work is alone noble. There is a perennial nobleness and even sacredness in work, there is always hope in a man that actually and earnestly works. In idleness alone is there perpetual despair. Work, never so mean, is in communication with Nature. An endless significance lies in work, a man perfects himself by working. Doubt, Desire, Sorrow, Remorse, Indignation, Despair itself all these like helldogs lie beleaguering the soul of the poor day-worker as of everyman ; but he bends himself with free valour against his task, and all these are stilled, all these shrink murmuring far off into their caves. The man is now a man. Labour, wide as the Earth, has its summit in Hea-

(१) स्वादो नैव बिना स्वेदं बिद्यामो न श्रमं बिना ॥

ven. Sweat of the brow; and up from that to sweat of the brain; sweat of the heart; which includes all Kepler calculations, Newton meditation, all sciences, all spoken Epics, all acted heroisms, martyrdoms—upto that agency of bloody sweat which all men have called divine. O! brother, if this is not worship, then I say, the more pity for worship, for this is the noblest thing yet discovered under God's sky. Who art thou that complainest of thy life of toil? complain not. Look up my wearied brother; see thy fellow-workers there in God's Eternity; surviving there, they alone surviving; sacred band of the immortals, celestial bodyguard of the empire of mankind."

This spirit of Carlyle's essay had been grasped and expressed much earlier by our Vedic seers. Several hymns of Rig and Atharva Veda indicate that by work alone we can be friendly to gods. Victory and hard work go together¹. In the 'Uddoga Parva' of the Mahabharat Sri Krishna, the divine friend, of the Pandavas, emphasised the importance and dignity of ceaseless effort by pointing out the existence of Heavenly bodies, which through perpetual motion, were serving humanity².

Determination Of Wages

The discussion of the question of why men work may lie more in the literature of Psychology than in that of Economics. Even the writers of Utopias have considered work as an essential part of their cities in the Sun, if only for the moral benefit of the citizens. For all who live on Earth, work, at a certain stage, becomes a necessity and reality. Adam Smith in his 'The theory of moral sentiments' and 'The wealth of nations' appears to have two views of labour's incentives—one as a philosopher and the other as an economist. The practical man of affairs seldom troubles himself about the theory of what makes men work. Since wealth and leisure and conspicuous consumption have become the marks of success in our commercial, industrial

(१) न ऋते भ्रान्तस्य सहाय देवाः (ऋ० ४।३३।११)
कृतं मे दक्षिणे हस्ते जयो मे सहाय आहित अथर्व० ७-५२-८)

(२) कर्मणामी भ्रांति देवाः परत्र कर्मणं देहं प्लवते मातरि देवा ।
अहोरात्रे विदधत् कर्मणं अतन्निर्तो नित्यमूदेति सूर्यः ॥
मासायमासानय नक्षत्रयोगानतन्निर्तश्चन्द्रमाश्चाम्यपति ।
अतन्निर्तो दहते जातवेदाः समिध्यमानः कर्म कुर्वन् प्रजाभ्यः ।
अतन्निर्ता भारमिमं महान्तं विभति देवी पृथिवी बलेन ।
अतन्निर्ताः शीघ्रमपि बहन्ति संतप्यन्त्यः सर्वं भूतानि नष्टः ॥
अतन्निर्तो वर्षति भरितेजाः संनादयन्तिरिक्षं विशदध ।
अतन्निर्तो ब्रह्मचर्यं च चारं श्रेष्ठस्त्वमिच्छन् बलमिद् देवतानाम् ॥

(महा० उद्योगपर्व अ० २९)

civilisation of modern times, the pursuit of these things has become the dominant motive of human behaviour. The use of wage system is coincidental with that of modern capitalism. Businessmen and economists share a deep interest in problems of wage determination for those who work in productive undertakings. The problem of adequate remuneration to workers is the crux of industrial conflict which has acquired a great importance in recent years. Good wages, healthy working conditions, reasonable hours, protection of status and security — these in general, constitute the necessary foundations of a satisfactory labour remuneration policy. In spite of the importance of other issues in labour management, wages remain the most vital matter at stake, the most controversial problem of modern industrial management.

As freedom of contract and wage labour became the prominent characteristics of economic order, there arose several theories for determination and payment of wages. The labour problem became an outcome of a conflict between two rights—rights of the employers and those of the employed. This clash of property and humanity can only be avoided by a reasonable and satisfactory system of wage payment. The fundamental basis of such a payment can only be (a) payment by time worked and (b) payment for output. Piece rates and time rates are the two most widely prevailing methods of industrial remuneration. Among the ancient thinkers in India, Shukracharya seems to be quite familiar with the concept of time or piece - wage or a combination of both. He has tried to illustrate the clear distinction between time and piece wages. He has pointed out that time wages may be paid annually, monthly or daily. Another important feature in employer - employee relations on which Shukra has thrown light is the fixation of hours of work and holidays with pay. The employees of the state, according to Shukra were to be classified into three keeping in view their speed and efficiency of work. This classification, made by Shukra, can be denoted by the terms—slow, medium and swift, and wages according to this classification were to be—ordinary, average and high¹. He has further elaborated the nature of such wages by pointing out that wages which suffice for only one individual's feeding are low wages, those which satisfy all necessities of an

- (१) कार्यमाना कालमाना कार्यकालमितिस्त्रिधा ।
 भूतिरक्षतानुतद्विज्ञः साधेया भाषिता यथा ॥
 अयं भारस्त्वया तत्र स्थाप्यस्वेता वर्ती भूतिम् ।
 दास्यामि कार्यमाना सा कीर्तिता तद्विदेशकः ॥
 (शेषे अगले पृष्ठे वर)

individual are medium wages and those which suffice for the needs of an individual's entire family are high wages¹.

The modern concept of a Minimum Wage is said to be a wage which is sufficient to satisfy at least the minimum needs of at least a frugal and steady workman. Two principles are usually adopted in fixing a basis, namely the principles of 'living wage' and 'fair wage'. In the 19th century the idea of minimum wage developed by the manifesto issued by the late Pope Leo XIII in 1891 in which he declared "self preservation is really the duty of one and all and it is a crime not to fulfil it. From it necessarily arises the right to procure those goods whereby life is sustained and the poor can procure them in no other way than by wages for work. There is an underlying principle of natural justice, greater and older than any free desires of the contracting parties to it, that the wage must be sufficient to support a frugal and steady workman." Shukra has clearly supported the idea of a minimum or living or fair wage by guaranteeing a minimum for every class of worker. Besides this, he has also suggested that wages must be according to the ability of workers. He was definitely against low wages and emphasised timely payment without any delay. According to him, wages could not be forfeited because that entailed great hardships for the workers and employees and made them hostile². One of the most firmly established psychological hypotheses of modern industrial psychology is that all efficiency is based on the happiness, comfort and welfare of the workers. It also takes into consideration indirectly the concept of real wages for the worker besides the

वत्सरे वत्सरे वापि मासि मासि दिने दिने ।
एतावतीं भूतिं तेहं दास्यामीति च कालिका ॥
एतावता कार्यमिदं काले नापित्वया कृतम् ।
भूतिमेतावतीं दास्ये कार्यकाल मितान्न सा ।

(शुक्रनीति अ०, २।३८५, से ३८८ तक)

- (१) मंदोमध्यस्तथा शीघ्रास्त्रिविधो भूत्य उच्यते ।
समामध्या च श्रेष्ठा च भूतिस्तेषां क्रमात्स्मृता ॥ (शुक्र नीति २।३९६)
परिपोष्याभूतिः श्रेष्ठासमाश्चाच्छादनाधिका ।
भवेदेकस्य भरणययासाहीन सज्जिका ॥ (शुक्र नीति २।३९०)

- (२) न कुर्याद् भूतिलोपं तु तथा भूतिबिलम्बनम् ।
अवश्यपोष्यभरणाभूतिर्मध्या प्रकीर्तिता ॥ (शु० नी० २।३८९)
यथा यथा तुगुण दाभूत कस्तद् भूतिस्तथा ।
संयोज्यातु प्रयत्नेन नृपेणात्महिताय च ॥
अवश्यपोष्यवर्गस्यभरणंभूतकाद्भवेत् ।
तथाभूतिस्तुसंयोज्याद्यद्योग्याभूतकाय च ॥
येभूत्या हीन भूतिकाः शत्रवस्तेष्वयं कृताः ।
परस्वसाधकस्तेतुछिद्रकोशप्रजाहराः ॥ (शुक्र नीति २।३९१-९३)

money or nominal wages. Shukra has shown a keen insight in this respect and has suggested that employees should never be insulted by the master. He has advocated the method of awarding prizes and thus encourage employees when they show efficiency in their work. Shukra has shown many ways of keeping the employees satisfied viz award of prizes, award of ranks, a sympathetic and kindly eye or behaviour, a smile, sweet words, delicious food, fine clothing, betel leaves, riches, welfare enquiry grant of rights, conveyances, jewellery, umbrellas, grant of pardon, honour, promotion, respect, love, stay in the neighbourhood, praise, help and appreciation¹. Shukra has also instructed that domestic servants should be given leisure both during a day and night. He has suggested that a bonus of three months' pay should be due to a servant who has served for five years. A fortnight's leave with allowances should be due to one who has been employed for a year; a life pension of one-half the pay to a public servant who has served for forty years and half the amount to his widow or minor children in case he dies in service. A bonus of $\frac{1}{4}$ th pay for an efficient servant for every year of his service with compensation to the family in the case of a worker who dies in harness². Provision for sickness leave has also been suggested by Shukra for different categories of employees.

- (१) भृत्यं प्रशिक्षयेन्नित्यं शत्रुत्वंत्वपमानतः ।
 भूतिं दानेनसं पुष्टामानेन परिर्वषिताः ॥
 सतिष्ठतामनुवाचायेनत्यजंयधिषिंहिते ।
 यथागुणास्त्वभृत्यांश्चप्रजाः संरंजयेन्मृपः ॥
 शाखाप्रदानतः कांश्चिदपरांस्फलानतः ।
 अग्न्यान्सुखक्षुषा हास्यंस्तथा कोमलयागिरा ॥
 सुभोजनं सुवसनंस्तान्बलंश्चधनंरपि ।
 कांश्चित्सुकुशलं प्रदत्तं रथिकारं प्रदानतः ॥
 बाहनानां प्रदानेन योग्याभरणं दानतः ।
 छत्रातपत्रं चमरं दीपिकानां प्रदानतः ॥
 क्षमया प्रणिपातेनमानेनाभिगमेन च ।
 सत्कारेण च ज्ञानेनहृदादरेण ज्ञेयेन च ॥
 प्रेम्णा समीपवासेन स्वार्थासनं प्रदानतः ।
 संपूर्णासनं दानेनस्तुत्योपकारं कीर्तनात् ॥ (शु० नी० २।४०८-४१४)
- (२) भृत्यानांगृहकृत्यार्थंदिवायामंसमस्तुजेत ।
 निक्षिपामन्नमयंनित्यंदिनभृत्येऽर्घ्यामकम् ॥
 पादहोनीभूतिस्वातन्त्र्यदद्यान्मासिकंस्ततः ।
 पंच वत्सरे भृत्येषु न्यूनाधिक्यंयथातथा ॥
 चाण्मासिकीं तुदीर्घातिंतदूर्ध्वेनचकल्पयेत् ।
 नैवपक्षार्थमातस्वहातभ्याल्पापि बभूतिः ॥
 सेर्वाविनानृपः पक्षवद्याद् भृत्याय वत्सरे ।
 चत्वारिंशत्सप्तमानीताः सेवयायेनर्धनृपः ॥ (शु० नी० २।३९७-४०२)

Regulation Of Wages

Manu has given indications for punishments to be imposed on those employees who do not carry out the work agreed upon. An employee who, without any sickness but because of haughtiness, does not fulfil the contracted task should be fined eight krishnal and should be paid no wages. If an employee, who had been ill and on becoming healthy, carries out the entrusted task will get wages even if he had been ill for a very long time. Whether an employee be diseased or healthy, if he does not carry out the allotted task or does not get it done by some one else will not get wages. This is the decision for non-payment of wages in accordance with the canon of Ethics¹. Both Manu and Kautilya appear to be less liberal in this respect probably because of the national loss involved by absenteeism and idleness. Kautilya recognises the contractual basis of employee-employer relations when he says, "Neighbours shall know the nature of the agreement between employer and employed or the master and his servant. The servant shall get the promised wages. As to wages not previously settled, the amount shall be fixed in proportion to the work done and the time spent in doing it at the rate prevailing at the time. Wages being previously unsettled, a cultivator shall obtain 1/10 th of the crops grown, a herdsman 1/10th of the butter clarified, a trader 1/10 th of the sale proceeds. Wages previously settled shall be paid and received as agreed upon. Artisans, musicians, physicians, buffons, cooks and other workmen, serving of their own accord shall obtain as much wages as similar persons employed elsewhere usually get or as much as experts shall fix²."

- (१) भृतोऽनार्तो न कुर्याद्यो वर्पात्कर्म यथोचितम् ।
 स वण्ड्यः कृष्णलान्घ्यष्टो न देयं चास्य वेतनम् ॥
 भ्रातृस्तु कुर्यात्स्वस्थः सन् यथाभाषितमादितः ।
 स दीर्घस्यापि कालस्य तत्प्रभेदेन वेतनम् ॥
 यथोचितमार्तः सुस्थो वा यस्तत्कर्म न कारयेत् ।
 न तस्य वेतनं देयमल्पो न स्यापि कर्मणः ॥
 एव धर्मोऽखिलेनोक्तो वेतनादानकर्मणः ।
 अत ऊर्ध्वं प्रवक्ष्यामि धर्मं समयभेदिनाम् ॥ (मनु० ८।२१५-२१८)

- (२) कर्मकरस्य कर्मसम्बन्धमासन्ना विद्युः ॥ यथा संभाषितं वेतनं लभेत ॥
 कर्मकालानुस्यमसंभाषितवेतनः ॥ कर्मकः सस्यानां गोपालकः सपिपां बंहेहकः
 पश्यानामात्मना व्ययहूतानां वशभागमसंभाषितवेतनो लभेत ॥
 कावशलिङ्गकुशोलवचिकित्सक वाग्जीवनपरिचारिकादिराज्ञाकारिक धर्मस्तु
 यथाऽन्यस्तद्विधः कुर्याद्यथा वा कुशलाः कृत्ययेयुस्तथाः वेतनं लभत ॥ (कौ० ३।११)

He has further suggested, "A servant neglecting or unreasonably putting off work for which he has received wages shall be fined 12 panas, and be caught hold of till the work is done. He who is incapable to turnout work, or is engaged to do a mean job, or is suffering from disease, or is involved in calamities shall be shown some concession or he shall allow his master to get the work done by a substitute. The loss incurred by his master or employer owing to such delay shall be made good by extra work. An employer not taking work from his labourer or an employee not doing his employer's work shall be fined 12 panas. An employee who has received wages to do a certain work which is, however, not brought to termination shall not, of his own accord, go elsewhere for work. If an employer, having caused his labourer to do a part of work, will not cause him to do the rest for which the latter may certainly be ready, then the unfinished portion of the work has to be regarded as finished. But owing to consideration of changes that have occurred in time and place or owing to bad workmanship of the labourer, the employer may not be pleased with what has already been turned out by the labourer. Also the workman may, if unrestrained, do more than agreed upon and thereby cause loss to the employer. The same rules shall apply to the guilds of workmen¹.

Disputes.

Disputes regarding wages shall be decided on the strength of evidences furnished by witnesses. In the absence of witnesses, the master who has provided his servant with work shall be examined. Failure to pay wages shall be punished with a fine of 12 panas or of five times the amount of wages²."

Division And Organisation Of Labour

Adam Smith, in 'The Wealth of Nations' propounded an idea of the division of labour. The idea of each man doing the

- (१) गृहीत्वा वेतनं कर्मा कुर्वतो भूतकस्य द्वादशपणो दण्डः सरोधश्चा कारणात् ॥ अश्वत्तः कुरिस्ते कर्मणि व्याधौ व्यसने वान्शयं लभते ॥ परेण वा कारयितम् ॥ तस्य व्ययं कर्मणा लभते ॥ भर्ता वा कारयितुं नान्यस्त्वया कारयितव्यो मया वा नान्यस्य कर्तव्यमित्यविरोधेभर्तुर कारयतो भूतकस्याकुर्वतो वा द्वादशपणो दण्डः ॥ कर्मनिष्ठापनेभर्तोरन्यत्र गृहीतवेतनो नासकामः कुर्यात् ॥ देशकालातिपातनेन कर्मणामन्यथाकरणे वा नासकामः कृत मनुमन्येत ॥ संभाषितादधिकक्रियायां प्रयासं मोघं कुर्यात् ॥ तेन संघभूता व्याख्याताः ॥ (को० ३।१४)
- (२) तेषामाभिः सत्तरात्रमासीत् ॥ ततो ऽन्यमुपस्थापयेत् ॥ कर्मनिष्ठाकं च ॥ न चानिवेद्य भर्तुः संघः किञ्चित्पहिरदपनयेद्वा ॥ तस्यातिक्रमे चतुर्विंशतिपणो दण्डः ॥ संघेन परिहृतस्यायं दण्डः ॥ इति भूतकाधिकारः ॥ (को० ३।१४)

thing he is most capable of doing was not unique with Smith. Plato, in his Republic, claimed that the formation of society itself was due to the benefits achieved through specialisation. An essential feature of scientific management of industry these days is to develop a science for each man's work and to select and train the workers, instead of letting them blindly choose their own work. This is undoubtedly based on the concept of different aptitudes of different individuals. The Vedas already directed for this and the application of the 'Varna-ashram' principle in ancient India, as already referred to, aimed at a scientific system of division of labour. There are several references in the Mahabharat to suggest the importance of scientific distribution of work among different individuals in accordance with their capacity of work. The Ramayan also throws light on this¹. Surely blessed is he who finds his work, because thereby he becomes most useful for individual and social welfare. The Bhagwat Gita instructs emphatically that death in one's own Vocation of life is preferable to following another's Vocation². Panini classified labour into skilled and unskilled. Unskilled labourers engaged in hard manual work were called 'Karamkar' and skilled workmen were called 'silpins'. Both their work and wages differed according to the nature of work assigned on the basis of their talents³.

The extensive literature, these days, on the theory of labour organisation stresses the principle that a society controlled by organised workers is more desirable than the system of control by property owners. The Webbs advocated the complete unioni-

- (१) कच्चिन्मूल्या महत्स्वेव मध्यमेषु च मध्यमाः ।
जघन्याश्च जघन्येषु भूत्याः कर्मसु योजिताः ॥
कच्चित् कारणिका धर्म सर्वशास्त्रेषु कोविदाः ।
कारयन्ति कुमारान्श्च योधमूल्याश्च सर्वशः ॥
कच्चिन्न सर्व कर्मान्ताः परोक्षास्ते विशङ्किताः ।
सर्वे वा पुनश्च सृष्टाः संसृष्टं चात्र कारणम् ॥

(महा० सभाषर्ष, अ० ५)

धार्मिकान् धर्मकार्येषु अर्थकार्येषु पण्डितान् ।
स्त्रीषु बलीवान् नियुञ्जीत क्रूरान् क्रूरेषु कर्मसु ॥

(महा० वनपर्व, अ० १५०)

कच्चित् सङ्ग्राम नीतिज्ञः शरस्ते बाहिनीपतिः ।
जयेष्ठान् जयेष्ठेषु कच्चिद् नियोजयसि कर्मसु ॥

(रामायण अयोध्याकांड)

- (२) श्रेयास्त्वधर्मो विगुणः परधर्मात्स्वनुष्ठितात् ।
स्वधर्मो निधनं धेयः परधर्मो भयावहः ॥

(गी० ३।३५)

- (३) India as known to Panini - Dr. V. S. Agrawal.

sation of wage earners and the direct participation of the organised workers in government. Adam Smith was aware of labour organisations, but many of the early economists in the West ignored such organisations either because they were unborn in their time or were in their infancy¹. Kautilya has referred to the organisation of workers as 'guilds of workmen' and has laid down rules for their regulation. He has pointed out that guilds of workmen could have a grace of seven nights over and above the period agreed upon for fulfilling their engagements. Beyond that, they had to find substitute and get the work completed. Without taking permission from their employer they could neither leave out anything undone nor carry away any thing with them from the place of work. They were to be fined twenty-four Panas for taking away anything and twelve Panas for leaving out anything undone. Guilds of workmen employed by companies as well as those who carried on any co-operative work were to divide their earnings either equally or as agreed upon among themselves. A healthy person who deserted his company after work had begun was to be fined 12 Panas for none could, of his own accord, leave his company². Modern trade unionism is comparatively of very recent growth in our country. It arose out of the intense industrial unrest which prevailed during the period following the termination of world war I. Capitalism and industrial revolution have created two classes of buyers and sellers of labour. Labouring classes all over the world have begun to realise that they can improve their bargaining power only by forming trade unions. The proper organisation of labour in a disciplined way is essential, but such an organisation should not indulge in adventurist tactics which injure not only the country but the cause of labour. We are all interested in raising the standards and the living conditions of workers, but this can only be achieved through greater production and any thing that comes in the way of that production is harmful to all. Workers have to be organised, but they have to play a patriotic rôle in the task of implementing the planning programme and building up national economy. Organisations of workers in our country have to lead the working class movement according to principles laid down by Gandhiji. They have to maintain industrial peace, to work enthusiastically in securing maximum production of food

(1) Basic teachings of the Great Economists.—John W. McConnell.

(२) संघभूताः संभूयसमृत्थातारो वा यथासंभाषितं वेतनं समं वा विभजेरन् । प्रक्रान्ते तु कर्मणि स्वस्थस्यापक्रमतो द्वादशपणो दण्डः ॥ न च प्राक्राम्यमपक्रमणे ॥ महापराधे तु द्रव्यवदाचरेत् ॥
(कौ० ३।१४)

grains, consumer goods and other necessities of life. Labour organisations have thus to play a very important and respectable role in dynamic and developing India of today as they did in ancient times.

Labour Welfare

Labour welfare is one of the basic foundations of modern industrial democracy and no decent social order can be established without it. It is an effort to make life worth living for workmen and works as lubricant in the industrial machinery. Social security measures aim at helping workers in times of dependency and form part of labour welfare schemes. It has already been pointed out that the state in ancient India was a welfare state and took all possible measures to help the needy or anyone who was unable to work. From a hymn of Rigveda (First Mandal) it appears that the state was to take steps to create social security¹. The poor and helpless, old and in particular families of soldiers and workmen, dying during their employment, were regarded as deserving king's care. In the Shanti Parva of the Mahabharat, we find instructions for security and maintenance of poor, helpless, old and widowed women. There were to be no beggars and no thieves in the kingdom and the powerless were never to be insulted². Kautalya, in book II Chapter I of his Arthashastra, has directed that those who did not heed the claims of their slaves, workmen and relatives were to be taught their duty by the king. Elders among the villages were to improve the property of bereaved minors till the latter attained their age. Kautalya has further pointed out that if a capable person or mother neglected to maintain his or her child, wife, mother, father, minor brothers, sisters or widowed girls, he or she was to be punished with a fine of 12 Panas. When without making provision for the maintenance of his wife and sons, any person embraced asceticism, he was to be punished and also the person who converted a woman to asceticism. It is to be noted here that able bodied persons had a duty towards their dependents and

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- (१) शतं मेवान्वक्ष्ये चक्षदानमृजाश्वन्तं पितान्धं चकार ।
तस्मा अक्षो नासत्या विचक्ष आशत्तं दस्त्रा भिवजावनर्बन् ॥
(ऋ० १।११६।१६)
- (२) कृपणानाथ वृद्धानां विषवामां च पोषिताम् ।
योगक्षेमं च दत्तिं च नित्यमेव प्रकल्पयेत् ॥
मा ते राष्ट्रे याचनका भवेयर्मा च दस्यवः
दुर्बलांस्तात मन्येषा नित्यमेवा विमानितान् ।
मा त्वां दुर्बल चक्षूषि प्रवहेयुस्तवाश्ववम् ।
(म० शांतिपर्वणि—राजधर्मपर्व)

Kautalya pleaded for the punishment of those who took to asceticism without making provision for their dependents¹. Complete labour welfare and social security measures cannot be brought about by government alone, but they can be most effective with the help of society as a whole and that was the idea behind Kautalya's philosophy for maintaining social security and solidarity.

Industrialisation is to be given top priority in the 2nd five year plan to acquire the strength whereby India can maintain her freedom, because conditions in India and the world over are quite different from those of the past. Theories of wages as developed by Adam Smith, Ricardo, Malthus and Lassalle no longer hold good for our country. The underlying idea that workers respond mainly to economic stimuli holds good for our country as well. A new labour philosophy, having a link with the ancient ideals and fitting in the changed circumstances of the country, is essentially needed. In such a philosophy, the economic future of the labouring class should be inseparable from that of the employers and both should advance in mutual respect, mutual understanding towards mutual prosperity. It is claimed by President Eisenhower that American worker strives for betterment not by destroying his employer and his employer's business but by understanding his problems of competition, prices and markets. The American employer also does not forget that good wages and progressive employment practices for his employees are good business. We, in our country, have to evolve a labour policy whereby the class struggle doctrine would no longer hold good and labour relations would be worked out in honest negotiations between employers and workers without government's unwanted and unwarranted interference. For creating such conditions, labour has not to be treated as a separate entity from capital, and labour and capital have to change their approach towards each other. In such a situation labour problems will be reduced to minimum. There will be no contest over sharing of the benefits of production and a deeper sense of common interest in greater production and a better life for all to share will be supreme.

- (१) बालवृद्धव्याधिव्यसन्यनाथांश्च राजा विभूयात् । स्त्रियमप्रजातां प्रजातायाश्च पुत्रान् ॥ बालवृद्धव्य ग्रामवृद्धा वर्षयेयुराव्यवहारं प्रापणात् ॥ अपत्यदारान् मातापितरौ भ्रातृन् प्राप्तव्यवहारान्भगिनीः कन्या विधवाश्च विभ्रतः शक्तिमतो द्वादशपणो दण्डोऽन्यत्र पतितेभ्यः । अन्यत्र मातुः ॥ पुत्रदारमप्रति विधाय प्रदत्तः पूर्वः साहसवशः स्त्रियं च प्रदत्तयतः ।

(को० २।१)

CHAPTER IX

TRADE, BUSINESS AND TRANSPORT PROBLEMS

इन्द्रमहं वणिजं चोदयामि स न एतु पुरएता नो अस्तु ।
नुदन्नरार्ति परिपथिनं मृगं स इशानो धनवा अस्तु मह्यम् ॥

ये पशानो बहवो देवयाना अन्तरा द्यावा पृथिवी संचरन्ति ।
ते मा जुषन्तां पयसा धृतेन यथा क्रीत्वा धनमाहराणि ॥ (अथर्व० ३।१५)

वेदा यो वीनां पदमन्तरिक्षेण पतताम् ।
वेद नावः समद्विजः ॥

वेद वातस्य वर्पनिमुरोऽर्ध्वस्य बृहत् ।
वेदा ये अध्यासते ॥ (ऋ० १।२५।७-९)

नदीपथे च विज्ञाय व्यवहारं चरित्रतः ।
यतो लाभस्ततो गच्छेदलाभं परिवर्जयेत् ॥ (को० २।१६)

Nature Of Trade

Trade, from the earliest days, has been one of the great up-builders of economic well-being of the human race. In England, the story of the transition from the self-sufficient manor of the Middle Ages to the great systems of national economy of the modern world is largely the story of the birth and maturing of foreign and domestic trade. The constantly expanding markets at home and abroad, after the Industrial and Commercial Revolutions, led to an increasing productivity of firm and farm. It was ultimately due to flourishing foreign trade of England which brought about the driving power and organising genius in the national economy of the country to establish the biggest empire in history. The Merchant adventurers and the East India company were synonyms for power and wealth. Their leaders were merchants whose commercial and political influence put them in the front rank of the nation's citizens¹. There are clear references in the hymns of Rig Veda for trading in distant lands for profit. Several hymns of Rig Veda indicate that ocean navigation was known to the Aryans of those days. A Rigvedic hymn (in Mandal X Sukta

136) refers to two oceans which may lead us to believe that India, in ancient times, had maritime relations with the East as well as with the west¹. Historians believe that the people of Mohanjo-daro maintained close contact with the outside world and that the Indus Valley had connections with several countries of the East and the West for purposes of trade.

Trade of a country can be divided into four categories—
 (a) Internal or Inland (b) coastal (c) External or foreign and
 (d) Entrepot trade. Ancient India had all types of trade and the merchant had an honoured and important place in the national economy of the country. The traditional plan of the Aryan village communities gives some indication of the existence of trade by the most important land routes. The broad street of the village running North and South was the way of the caravans conveying the rich merchandise to the capitals of the Aryan kings. In the Van Parva of the Mahabharat, there is a reference of such a trade caravan which Damyanti saw in the forest when she was in search of king Nala. This reference gives a vivid description of the traders of those days and the articles of trade which they carried². Ever since the revolution in the methods of production in Europe, world trade grew enormously, but the case of India has been different. Her internal trade has been many times larger than her external trade. According to some estimates, the volume of internal trade in India, even now, is more than ten times larger than her sea-borne trade. India is a land of vast dimensions and rich variety of

(१) एता धियं कृणवामा सखायोऽप या मातां मृणूत व्रजं गोः ।

यमा मनुविशिष्टिप्रं जिगाय यया वणिग्बहुकुराया पुरीषम् ॥

(ऋ० ५।४५।६)

तं गतं यो नेमस्त्रिषः परीणतः समग्रं न संचरणे सनिष्ठयः ।

(ऋ० १।५६।२)

वातस्याद्वो वायोः सखाय देवेषितो मुनिः ।

उभौ समुद्रावा क्षेति यच्च पूर्वं उतापरः ॥ (ऋ० १०।१३६।५)

(२) गत्वा प्रकृष्टमृचवानं दमयन्ती क्षुचिस्मिता ।

बबक्षाय महासार्धं हस्त्यस्वरथसंकुलम् ॥

साह्रवीद् वणिजः सर्वान् सार्धवाहं च तं ततः ।

क्व न यास्यति सार्धोऽयमेतदाख्यातुमर्हति ॥

सार्धोऽयं चैविराजस्य सुबाहोः सत्यर्वाशनः ।

क्षिप्रं जनपदं गत्वा लाभाय मनुजात्मजे ॥

एवं प्रकारं बहुभिर्देवाकम्प्य हस्तिभिः ।

राजन् विनिहतं सर्वं समुद्धं सार्धमण्डलम् ॥

रत्नराशिर्विशिर्णोऽयं गृह्णीष्व किं प्रयावत ।

(महा० वनपर्व, अ० ६४।६५)

production within her own frontiers and there has been a movement of goods within different parts of the country since times immemorial. Manu has briefly referred to different parts of our country. In the Mahabharat also, there is a reference to different states which must have had trade relations with each other in those days¹. Kautilya has also referred to the division of the country for discussing the quality of elephants. Divisions pointed out by him are Kalinga, Anga, Karusha etc².

According to Panini, traders were called Vanik and Vanija. These terms seem to have been applied to traders without reference to caste e.g. Madra-Vanija, one who trades with the Madra country. Merchants were named after the nature of their business and the amount of capital they invested in it e.g. (a) Kraya-Vikrayika, whose main occupation was buying and selling, (b) Vasnika, a merchant who invested his own money in business and (c) Samasthanika, a member of a commercial guild. Panini has also referred to other classes of traders e.g. Prastarika, one who dealt in minerals. The traders were also named after the articles in which they dealt and from the countries visited by them for business e.g. Ashwa-vanija, Gandhara-Vanija, Kashmir-Vanija and Madra-Vanija³. These examples of merchants visiting distant provinces or parts of the country on business point to inland trade activity in those days. The Jatakas also refer to caravans of merchants going from one part of the country to another for purposes of trade. Inland trade between Vidha, Kashmir, Gandhar, Magadh, Sravasti, Benaras and Ujjain is indicated. The economic system of ancient India gave prominence and preference to production-for-use as against production-for-exchange especially in

- (१) कुवक्षेत्रं च मत्स्याश्च पाञ्चालाः शरसेनकाः ।
एष ब्रह्मविदेशो वै ब्रह्मावर्तविनन्तरः ॥ (मनु० २।१९)

काशमीरान् वरवान् कुम्भीन् भुवुकान् मालवाञ्छकान् ।
चेविकाशिकरुषाश्च ऋषिकान् कथकशिकान् ॥
अङ्गान् वङ्गान् कलिङ्गाश्चमागधान् काशिकोसलान् ।
रात्रायणान् वोतिहोत्रान् किरातान् मार्तिकावतान् ॥
एतानन्याश्च राजेन्द्रान् देशे देशे सहस्रत्रयः ।

(महा० सभाषर्ष, अ० ३८)

- (२) कलिङ्गाङ्गजाः भेष्ठाः प्राच्याश्चेति कश्मजाः ।
दशाण्डिचापरान्ताश्च द्विपानां मध्यमा मताः ॥
सौराष्ट्रिकाः पाञ्चजनाः तेषां प्रत्यवराः स्मृताः ।
सर्वेषां कर्मणा दीर्यं जवस्तेजश्च वर्धते ॥ (की० २।२)

- (३) India As Known To Panini—Dr. V. S. Agrawal.

case of certain commodities. Manu has given a long list of articles in which trading was not approved for the Brahmans even if they followed the profession of a vaishya compelled by circumstances. The selling of Soma plant, foodgrains, all kinds of liquids including cow's milk, curds, butter, medicines, fruits, roots, salt, oilseeds; undyed woollen cloth, water, arms, poison, meat, oil, honey, intoxicants, indigo, lac and some kinds of animals were banned to be sold by Brahmans¹. In spite of the predominance of internal trade, there is ample evidence to be inferred from Vedic hymns and historical records that Indians of all ages, since the earliest dawn of history, have been great carriers by land as well as by water. Foreign trade, as the source of new wealth and a means of filling up the gap in a country's productive organisation was an honoured and a legitimate means of livelihood. On land routes, Indian caravans travelled from one end of Asia to the other. Within the basic conception and justification of all foreign trade, Indian thinkers were as penetrating as the thinkers of any other country. Both Manu and Kautilya have given detailed analysis on the nature and importance of both inland and foreign trade. Manu in chapter IX of his Smriti has pointed out that the traders should have full knowledge of the qualities of grain, the rates of commodities in different countries, the knowledge of profit in timely purchase and sale, a knowledge of several languages and correct methods of storing things and the methods of purchase and sale.² Kautilya, in his Arthashastra, has pointed out that the superintendent of commerce was to ascertain demand or absence of demand for and rise and fall in the price of various kinds of merchandise. He was also to gather information as to the conveyance charges, subsistence on the way, value of foreign merchandise that can be obtained in barter for local merchandise. Kautilya has suggested that the superintendent

- (१) सर्वान् रसानपोहेत कृताञ्च च तिलैः सह ।
 अश्ममो लवणं चैव पशवो ये च मानवाः ॥
 सर्वं च तान्तत्वं रक्तं शाणक्षौमाविकानि च ।
 अपि चेत्स्युररक्तानि फलमूले तथोषधीः ॥
 अपः शस्त्रं विषं मांसं सोमं गन्धाश्च सर्वशः ।
 क्षीरं क्षौद्रं दधि घृतं तैलं मधु गुडं कुशान् ॥
 आरण्याश्च पशून् सर्वान् दंष्ट्रिणश्च वयांसि च ।
 मद्यं नीलि च लाक्षां च सर्वाश्चैकशफांस्तथा ॥ (मनु० १०।८६-८९)

- (२) सारासारं च भाण्डानां देशानां च गुणगुणान् ।
 लाभालाभं च पण्यानां पशूनां परिवर्धनम् ॥
 भृत्यानां च भूति विद्याभाषाश्च विविधानुगाम् ।
 द्रव्याणां स्थानयोगाश्च कथं विक्रयमेव च ॥

(मनु० १।३३१-३३२)

was to show favour to those who imported foreign merchandise. Mariner and merchants importing foreign merchandise were to be favoured with remission of trade taxes so that they could derive some profit¹. As regards the sale of king's merchandise in foreign countries, the superintendent was to ascertain the value of local produce as compared with that of foreign produce that could be obtained in barter. He was also to find out by calculation whether there was any margin left for profit after meeting the payments (to the foreign king) such as toll, road-cess, conveyances, tax payable at military stations, ferry charges and a portion of merchandise payable to the foreign king. If no profit could be realised by selling the local produce in foreign countries, he was to consider whether any local produce could be profitably bartered for any foreign produce. He was then to send one quarter of his valuable merchandise through safe roads to different markets². Another characteristic of the ancient Indian commerce was the presence of a large entrepot trade. The existence of an entrepot trade could not have been possible in those days without the presence of a considerable fleet of merchantmen for transport by sea and mighty caravans for similar purpose by land.

Organisation of Trade and Business

Organisation of trade and business was carried to a high level in ancient India. It is noted in the Cambridge History of ancient India that Crafts and Commerce were flourishing and highly organised under conditions of individual and corporate competition. Partnership in Commerce was fairly well understood though individual freedom of initiative was not restricted. The Joint Stock Enterprise by merely travelling together in the same caravan on land or board the same vessel was also recognised. The traders were partly state officials in-Charge of royal merchandise or in superintendence of matters connected with prices and sale. Permanent associations in civil life included trader and merchant

(१) पण्याध्यक्षः स्थलजलजानां नानाविधानां पण्यानां स्थलपथवारिपथोपयातानां सारफलववर्धनार्थं प्रियाप्रियतां च विद्यात् । वारिपथे च यानभाटकपथवनपथप्रतिपण्यार्थं प्रमाणयात्राकालभयप्रतीकारपण्य पत्तन चारित्राण्युपलभेत । (की० २।१६)

(२) परविषये तु पण्यप्रतिपण्ययोरर्धमूल्यं चागमय्य शुल्कवर्तन्यातिवाहिकगुल्मतगदेय-भक्तभाटकव्ययशुद्धमूल्यं पश्येत् । असत्यद्वये भाण्डानिर्वहणेन पण्यप्रतिपण्याद्येण वा लाभं पश्येत् । ततः सारपादेन स्थल व्यवहारमवधना क्षमेण प्रयोजयेत् । अदव्यन्तपालपुरराष्ट्रमूल्यंश्च प्रतिसर्गं गच्छेदनुग्रहायम् । आपदि सारमात्मानं वा मोक्षयेत् । आत्मनो वा भूमिमप्राप्तः सर्वदेयं विशुद्धं व्यवहरेत् । (की० २।१६)

guilds (Shreni) and clubs (Puga). There were also temporary combinations under corporate responsibility for the execution of contracts. Collective obstruction was known and penalised.¹ For purposes of discipline of the caravans, the 'Sarthvah' or caravan chief was accorded a certain degree of prestige and authority among his fellow travellers and traders. The regulations of the guild in the country and of the government in general saw to it that the demands, both in quantity and quality, of the consumer inside and outside the country were not neglected. Yagnavalkya has referred to the sharing of profits in partnership in accordance with the amount of capital invested by different partners keeping in view the agreement of the partnership concerned. He has also pointed out that if any of the partners, without consulting others, destroyed any article of trade or neglected his duties, he was to be responsible for the loss sustained by the business. He has further directed that if any of the partners protected some article of trade from destruction in a political revolution, he was to be awarded with a 1/10th share of the property saved. Embezzlement of business funds was to be punished with dismissal from partnership². The trade and industry of the country during the days of Kautalya was characterised by highly developed organisations. The institution called 'shreni' was a corporation of men following the same trade, art or craft and resembled the guilds of medieval Europe. Almost every important business and trade had its own guilds which laid down rules and regulations for the conduct of members with a view to safeguard their interests. These rules and regulations were recognised by the law of the land. Each guild had a definite constitution with a President and a small executive council and the head of the guild was an important person in a court. One of the most important functions of these guilds was to serve as local banks and on the whole the guilds were remarkable institutions of ancient India³.

(1) Cambridge History of India Vol. 1, Page 219, 430.

(2) समवायेन वणिजां लाभार्थं कर्म कुर्वताम् ।
लाभालाभो यथावश्यं यथा वा संविदा कृती ॥
प्रतिषिद्धमनाविष्टं प्रमादाद्यच्च नाशितम् ।
स तद्द्याद्विप्लवाच्च रक्षिता वशमांशभाक् ॥
जिह्वां त्यजेयुर्निर्लाभमवतोऽप्येन कारयेत् ।
अनेनविधिराख्यात ऋत्विक्कर्मकर्मिणाम् ॥

(याज्ञ० २।२६३-२६४)

(3) Ancient Foundations of Economics—K. T. Shah.

There were also other forms of corporate organisations besides guilds. Trade was carried on joint stock principles and there were traders' leagues and unions with a view to cause rise and fall in the value of articles and thus increase or decrease the margin of profit. According to Panini, a place of business was called 'Apana' and articles of trade 'Panya'. These when properly displayed in shops were called 'Kravya'. The system of 'Satyapana' i. e. the practice of paying earnest money in settling the sale and purchase of goods was known. Panini has also referred to sale transactions named after the amount of profit earned from it. He has pointed to some kind of corporate business carried on by 'Samastanik' traders. The three stages in the journey of a trader, according to Panini, were called (a) 'Harati'—at the source, (b) Vahati—in the process of transport (c) Arhati—at the end of journey¹.

Articles of Trade

Trade flourished in all ages of Indian history side by side with the indigenous industry. The chief articles of export from India were spices, perfumes, medicinal herbs, pigment, pearls, precious stones like diamond, sapphire, animal skins, cotton cloth, silk yarn, muslin, indigo, ivory, porcelain. The chief imports were cloth, linen, perfume, glass-vessel, silver, gold, copper, tin and lead. Kautalya has pointed out that a person importing forbidden articles like weapons, mail armour, metals, chariots, precious stones, grains and cattle was not only punished but also made to forfeit his merchandise². As names of marketable articles, Panini mentions salt, perfumes like Kisara, Tagara, Guggulu, Ustra and Solalu (a kind of perfume). Another list includes economic products such as silk fabrics, wool and woollen stuff, linen and linen goods, hemp, cotton, blankets like panyakambala of a fixed weight and set standard, pravara and Pandu-Kambala imported from Gandhara, deer skins, skins of tigers and leopards used as upholstering material for chariots, dye-stuffs like lac and indigo, sack and grain containers, big and small leather containers, leather goods as shoes, straps and throngs, iron chains, spikes, tools and instruments like sickle, ploughshare, yoke, spade, oar, loom and shuttle, food stuffs, milk, curds, butter, vegetables, cereals and pulses, utensils and pottery of various sizes to cook different quantities, intoxicating drinks like madya, sura prepared in distilleries and

(1) India as known to Panini—Dr. V. S. Agrawal.

(2) शस्त्रबर्भकवज्रोहरथरत्नधान्यपशूनामन्यतमनिर्वाह्यं निर्वाह्यतो यथावघृषितो वपः
पण्यनाशश्च । (कौ० २।२१)

sold in booths and the costly kapisayam imported from Kapisi in North Afghanistan. Gold and silver ornaments like karnika, gems like emerald, ruby ; metals as gold, silver, copper, lead and tin, arms and weapons, spears, battle axe, bows and arrows and coats of mail, musical instruments like lute, cymbals and miscellaneous objects like images, garlands, perfumery, balance weights, coins and various conveyances like wagons, chariots and boats. Panini particularly mentions merchants who dealt in cows, bulls and horses¹. The nature of India's trade seems to have changed to a very great extent since the days of Panini and Kautilya. Both the value and volume of trade (internal as well as external) have changed considerably. There must have been a favourable balance of trade when India exported a variety of goods, as already referred to, to the outside world. Foreign domination in India brought about a decline of her indigenous industry and export trade. In spite of a favourable balance of trade, the balance of accounts became unfavourable to India. Even these days, we stand in a great need of foreign exchange. It appears that tea did not form part of the articles of export in ancient India. India now grows and exports more tea than any other country in the world. Each year the tea industry earns over Rupees hundred crores of valuable foreign exchange—exchange which the country needs so badly at the present time. The balance of payments position of our country can improve when the 'exports promotion programme' gets an encouragement both from the people and the government. It is very essential that our country should become self-sufficient in matters of food and imports of food grains should be stopped.

Regulation of Trade

A great importance was attached to trade as an integral factor of national prosperity in ancient India, but this did not, however, commercialise the Indian civilisation into an unlimited frenzy of mammon worship. The regulations of the state demanded that the quality and artistic craftsmanship were not sacrificed to the requirements of the quantity. Though disposal of country's surplus produce to better advantage, either in the internal or external market, was an honoured and legitimate means of livelihood, yet there was no sense of either preying upon one's fellows or securing undue advantage by unjust means for oneself. Both Manu and Kautilya realised the real origin and ultimate justification of all commerce. They understood its reaction on increasing production and through it of

1. India as known to Panini—Dr. V. S. Agrawal.

increasing employment for skilled as well as unskilled labour. Manu has given good directions for morality in trade. He has suggested that selling commodities which are rotten, less in weight or not according to sample is undesirable. The great law giver, Manu, has insisted in more than one place on these cardinal principles of sound trading. He has pointed out that if any national of the country tries to export for profiteering the prohibited commodities, the king has a right to forfeit his entire property¹. Exports promotion is the need of the hour. The test of the Indian industrialists and their sense of nationalism lies in the fact of their being conscious of the exports policy of the government of India at a time of national crisis in the field of foreign exchange. The exports drive will have to be maintained for meeting the situation and the success of the drive will depend on how far we are able to adhere to the supply of quality commodities as indicated by Manu. The system of quality marking is likely to help in retaining foreign markets and thus earn foreign exchange. According to the Arthashastra of Kautilya, the department of commerce required a large number of superintendents and the markets were in charge of a government officer called 'Panyadhaksha'. It was his duty to put the Government products in the market under favourable conditions, to organise the import of goods required in the locality and to supervise their sales at reasonable rates and to export merchandise when this could be done at a profit. Rates were also controlled by them and cornering of supply was prevented. Merchants who combined to create a 'corner' in a given commodity and interfered generally with the normal functioning of the Price Machine were open to heavy punishment. The duties of the Superintendent of Commerce as laid down by the Arthashastra (Book II Chapter 16) not only prevented or minimised chances of deceit or undue advantage taken of the buyer by the seller ; it also ensured that prices were not exorbitant and that the material, its style, quality or measure corresponded precisely to the terms of the bargain. The

(१) नान्यद्वयेन संसृष्टरूपं विक्रयमर्हति ।
न चासारं न च न्यूनं न द्वारेण तिरोहितम् ॥

(मनु० ८।२०३)

राज्ञः प्रख्यातभण्डानि प्रतिविद्धानि यानि च ।
तानि निहृरतो लोभास्तर्वाहारं हरेन्नृपः ॥
ज्ञातकस्थानं परिहरन्नकाले कयविक्रयी ।
मिथ्यावादी च संसृष्टाने द्वाप्योऽष्टगुणमस्ययम् ॥

(मनु० ८।३९१।४००)

superintendent was also to ascertain the time suitable for distribution, centralisation, purchase and sale¹.

Price Fixation

According to Manu, the King was to fix the purchase and sale price of commodities after looking into their place of origin, destination, the period of storage as well as the margin of profit on the sale. Prices fixed were to be reviewed after five days and also after the lapse of five fortnights. It appears that the 'cost of production' theory as well as the 'utility theory' of value were well understood by the ancient thinkers of India. Shukracharya, in his discussion of the determination of value of a commodity, has given indication of the importance of scarcity of a commodity. He has further pointed out that the value determination should take into consideration time and place factors and also that a commodity having no utility can have no value². The officials incharge of the markets recorded in writing "who the merchants are, whence they come, with what merchandise and where it has been produced". The country produce was subject to octroi and such other dues. The superintendent of commerce was to fix a profit of five percent over and above the fixed price of the local commodities and ten percent of foreign produce. Merchants who enhanced the prices or realised profit even to the extent of half a Pana more than the above in the sale or purchase of commodities were to be punished with a fine of five Panas. Prices of ordinary goods were fixed and proclaimed daily by the officials; similarly all weights and measures were subject to inspection³. Manu has

(१) पण्यध्यक्षः.....विद्यात् । तथा विक्षेप संक्षेप क्रय विक्रय प्रयोग कालान् ॥ यच्च पण्यं प्रचुरं स्यात्तदेकी कृत्यार्धमारोपयेत् प्राप्तेऽर्धे वाघान्तरं कारयेत् ॥ (को० २।१६)

(२) आगमं निर्गमं स्थानं तथा वृद्धिक्षया वृद्धौ ।
विचार्य सर्वपण्यानां कारयेत्क्रयविक्रयो ॥
पञ्चरात्रे पञ्चरात्रे पक्षे पक्षेऽथवा गते ।
कुर्वीत चर्षां प्रत्यक्षमर्घसंस्थापनं नृपः ॥ (मनु० ८।४०१-४०२)
रत्नभूतं तु तत्तस्याद्यद्यवप्रतिमं भुवि ।
यथा देशं यथा कालं मूल्यं सर्वस्य कल्पयेत् ॥
न मूल्यं गुणहीनस्यैव्यवहाराक्षमस्य च ।
नीच मध्योत्तमत्वं च सर्वस्मिन्मूल्यकल्पने ॥

(शु० नो० ४।२१५-१६)

(३) तेन धान्यपण्यविक्रये व्यवहरेतानुग्रहेण प्रजानाम् ॥ अनुज्ञातक्रयादुपरि चर्षां स्वदेशीयानां पण्यानां पञ्चकं शतमाजीवं स्थापयेत् ॥ परदेशीयानां दशकम् ॥ ततः परमर्घं वर्षयतां क्रये विक्रये वा भावयतां पणशते पञ्चपणावृद्धिशतो दण्डः ॥

(को० ४।२)

also suggested inspection of weights and measures after every six months¹. According to Kautilya, the superintendent of weights and measures was to have them manufactured in different units of weights. Weights were to be made of iron or of stones available in the countries of Magadha and Mekala or of such things which could neither contract when wetted nor expand under the influence of heat².

India has at present no common system of weights and measures. There are not less than 143 systems in use. This multiplicity gives room for mal-practices. The introduction of an uniform system throughout the country based on Metric weights and Measures will be very convenient and make calculations extremely easy, especially because the country has already adopted the decimal coinage. The Standards of Weights and Measures Act, 1956 has laid down the basic units under the metric system. The reform will be gradual so as to cause minimum inconvenience to the people. Even after its introduction in an area or a trade, the traditional weights and measures will be permitted to be used for a period of three years. The change-over to the Metric system of Weights and Measures began from October, 1958. The basic unit of weights would be the kilogram which would be equal to 1 seer 6 tolas. The Sub-units would be milligrams, centigrams, decigrams, grams, decagrams and hectograms in multiples of 10 each. For purposes of comparison it may be noted here that Kautilya suggested two types of balance—'Samavratra' and 'Parimani'. The 'Parimani' was to be of twice as much metallic mass as that of 'Samavratra'. In the 'Samavratra', symbols such as 1 pala, 12, 15, and 20 palas were to be marked. After that each place of tens up to 100 was to be marked. In the place of five and multiples of five, the sign of Nandi (Svastika) was to be marked. In the 'Parimani', marks such as 20, 50, and 100 above its initial weight of 100 were to be carved³. There were other

- (१) तुलामानं प्रतीमानं सर्वं च स्यात्सुलक्षितम् ।
षट्सु षट्सु च मासेषु पुनरेव परीक्षयेत् ॥ (मनु० ८।४०३)
- (२) पौतवाध्यक्षः पौतवकर्मन्तान्कारयेत् ॥ प्रतिमानाभ्ययोमयानि मागधमेकलक्षालमयानि
यानिवा नोदकप्रवेहाभ्यां वृद्धिं गच्छेयुर्दण्डेन वा ह्लासम् । (को० २।१९)
- (३) पञ्चविंशतपललोहं द्विसप्तत्यङ्गुलायामां समवत्तां कारयेत् ॥ तस्याः पञ्चपलिकं
मण्डलं बद्ध्वा समकरणं कारयेत् ॥ ततः कर्षात्तरं पलं पलोत्तरं दशपलं द्वादश
पञ्चदश विंशतिमिति पदानि कारयेत् ॥ तत आशतादृशोत्तरं कारयेत् ॥ अक्षेषु
नान्योपिनद्धं कारयेत् ॥ द्विगुणलोहं तुलामतः षण्णवत्यङ्गुलायामां परिमाणं
कारयेत् ॥ तस्याः शतपदादूर्ध्वं विंशतिः पञ्चदशश्च शतमिति पदानि कारयेत् ॥
(को० २।१९)

types of balance as well such as public balance, servants' balance and harem balance. The superintendent charged four mashas for stamping weights or measures. Traders were to pay every day one 'kakani' to the superintendent towards the charge of stamping the weights and measures¹. Regulation of trade in the country would be easier with an uniform and efficient system of weights and measures even if we take into consideration the different suggestions of Kautilya because conditions in the country have changed considerably since the days of Kautilya.

Transport In National Economy

Transport is the life blood of trade and industry of a country. The history of civilisation is the history of transport and communications. If agriculture and industry are the body and bones of a national organism, means of transport and communication are its nerves. Development of the means of transport is the key to the unlocking of the country's wealth. Among the means of transport of a country, we include generally both the vehicle and the highway. On the basis of the medium, transport can be classified into (a) land (b) water (c) air. A Rigveda hymn (Mandal 1 Sukta 116) refers to all these forms of transport known to the people of ancient India. Aryans in ancient India, it appears, were conscious of the necessity of the different forms of transport and regarded the maintenance and protection of the public highways as one of the duties of the king of the country². The transport sector of the present economy of our country includes railways, roads, ports and harbours, shipping and civil air transport. There is no clear mention of the modern type of railways in ancient India. For purposes of transport on land, pack animals like yak, goats, horses, camels and elephants were used in different regions according to local conditions. Man has, on several occasions, used himself as a beast of burden. Examples of Hanuman and Bhim, both regarded as the sons of wind god, may appear to be exceptional, but they

(१) तत्पलशतमायमानो ॥ पञ्चपलावरा व्यवहारिकी भाज्यन्तः पुरभाजनी च ॥
चतुर्मासिकं प्रातिवेचनिकं कारयेत् ॥ प्रातिवेचनिकं काकणिकमहरहः पौतवाध्यक्ष य
दद्युः ॥ (को० २।१९)

(२) तिस्रः क्षपस्त्रिरहाति व्रजद्विनिस्तया भुज्यमूह्यः पतङ्गः ।
समुद्रस्य चम्बलाद्वस्य पारे त्रिभी रथैः शतपद्भिः खलद्वयः ॥
(ऋ० १।११६।४)

अनुक्षरा ऋजवः सन्तु पथ्या येभिः सज्जायो यन्ति नो वरेयम् ।
समर्पमा सः भगो नो निनीयात्तं जात्यस्य सुयममस्तु देवाः ॥
(ऋ० १।१८५।२१)

played an important part in this respect. Hanuman brought Dronagiri from a far away distant land for revitalising Lakshman. Bhim moved out of the 'Lakshagraha' taking his mother Kunti and two brothers on his back and shoulders to a place of safety¹.

Among other units of conveyance on land in ancient India, chariots and carts drawn by oxen and horses were most popular. The chariots of the rich were drawn by two and sometimes four horses. There are several references in the Epics about the beautiful chariots of Indra, Kuber, Sri Krishna, Yudhishtira, Duryodhan, Rituparna and Nala which had fast-moving horses¹. Kautalya attached a great importance to roads from a military and economic point of view. The principal Rajpath or royal road of Chandragupta's empire was that which passed through Pataliputra and continued right upto the North-Western frontier. Kautalya details many different kinds of roads classifying them according to use and destination. In the towns and forts, there were roads for chariots paved with stones or plank of palm trees, roads for beasts of burden and for general traffic and roads leading to cremation grounds. In the districts besides the main roads, carts and cattle-tracts and foot paths, there were roads leading to the central villages and forts. There were roads connecting the smaller villages, roads leading to mines and to

- (१) संजोषको समो विश्वो विशत्यो देव निमित्तो ।
चन्द्रश च नाम्ना द्रोणश् च पवंती तो महोदयो ॥
गच्छवीरमहाबाहो भ्रातृभिर्क्षां ददस्व मे ।
चतुर्णाम् एव भ्रातृणाम् अस्माकं पंचमो भव ॥
अहं शलवनीयतां सप्तद्वीपां स-सागराम् ।
महोम् अनोत्थाऽऽगमिष्ये यावत् नोत्तिष्ठतेरविः ॥ (रा० युद्धकांड)

भीमसेनस्तु राजेन्द्र भीमवेगपराक्रमः ।
जगाम भ्रातृनादाय सर्वान् मातरमेव च ॥
स्कन्धमारोप्य जननीं यमावङ्केन वीर्यवान् ।
पार्थो गृहीत्वा पाणिभ्यां भ्रातरो सुमहाबलः ॥

(म० जतुगृहपर्व अ० १४७)

- (२) पक्षिणामिव निर्घोषः कुबेरसदनं प्रति ।
बभूव परमाश्वानामरावतपथे यथा ॥
ते जग्मस्तूर्णमाकाशं घनाधिपतिवाजिनः ।
प्रकर्षन्त इवाभ्राणि पिबन्त इव मारुतम् ॥
स भीमवचनाद् राजा कुण्डिनं प्राविशत् पुरम् ।
नादयन् रथघोषेण सर्वाः स विविशोविशः ॥
रथनेकेन क्षुभ्रेण हन्तिभिः परिषोढतः ।
पञ्चवासाद्भिर्हृदयैश्च पटुशर्तैश्च पदातिभिः ॥

(म० वनपर्व म० १६२)

pastures, garden groves, forests and elephant preserves. Each road had a specified width varying from four feet for foot-paths and cattle tracks to 32 feet and twice that width for the royal roads, and main trade routes. Among the vehicles moving on these roads six kinds of chariots are mentioned. Merchandise on the roads was carried by carts, camels, asses and by human porters as well¹. The superintendent of chariots attended to the construction of chariots which were made of different types².

Water and Air Transport

It must be admitted that before an organised system of roads was developed, the waterways must have been the earliest means of passage and transport and the chief line of communication between different civilised settlements. For crossing the oceans and big rivers, the Rigveda refers to special types of boats. The hymns pertaining to such boats occur in Rigveda Mandal one³. The Epics give a detailed description of several rivers which served as the medium of transport. In the Jatugraha-Parva of the Mahabharat, the description of a mechanically propelled boat constructed for safe passage of the Pandavas can convince us that the art of constructing efficient units of conveyance on water was known in ancient India. The boat was capable of weathering the storms and it was with the help of such a boat that Kunti, with her sons, crossed the Ganga after her escape from 'Lakshagraha'. Rama, when banished to the forest by his father, crossed the Ganga in a boat

(१) त्रयः प्राचीनाराजमार्गास्त्रय उदीचीना इति वास्तुविभागः ॥ चतुर्वर्ण्डान्तरा रथ्या
राजमार्गं द्रोणमुखस्थानीयराष्ट्रं विधीतपथाः सयोनोयध्यूहदमशान ग्रामपथश्चा-
ष्टदण्डाः ॥ चतुर्वर्ण्डः सेतुवनपथः ॥ द्विदण्डो हस्ति क्षेत्रपथः ॥ पञ्चवारत्नयो-
रथपथश्चत्वारः पशुपथः ॥ द्वौ क्षुद्रपशु मनुष्यपथः ॥ (को० २।४)

(२) अश्वार्थेण रथाद्यक्षो व्याख्यातः ॥ स रथकमन्तान्कारयेत् । तस्मादेकांस्त राश्वरा
आवहन्तरादिति सप्तरथाः ॥ देवरथपुष्परथसामिकपाशियाणिकपरपुराभियानिक-
वेनयिकाश्च रथाङ्कारयेत् ॥ (को० २।३३)

(३) तुष्टो ह भुज्युमद्विनोदमेघे रथि न कश्चिन्ममूवां अवाहाः ॥
तमूहयुनो भिरात्मन्वतीभिरन्तरिक्षप्रभृभिरपोदकाभिः ॥
अनारम्भणे तववीरयेयामनास्थाने अग्रभणे समूहे ।
यद्विबना ऊहयुभुज्युमस्तं क्षतारिर्त्रा नावमातस्त्वित्वांसम् ॥

(आ० १।११५।३-५)

and met Bharadwaj for necessary guidance¹. During the days of Kautalya, the department of navigation was a separate one charged with the duty of protecting travellers against river and sea pirates, of providing and maintaining harbours, ferries and bridges and regulating all water traffic. Government vessels were made available for the transport of merchandise by sea and rivers ; the department was responsible for their being properly equipped and manned and in the event of a vessel being lost or damaged, the State was liable to make good the merchant's loss. Kautalya mentions sea-going vessels both for coastal traffic and for larger voyages to Burma and China. There were both private and Government ferries and a considerable variety of them. Besides boats suitable for crossing large rivers and for the transport of merchandise, there were such primitive arrangements as rafts of timber or bamboo tied together. Chapter twenty eight Book II of the Arthashastra is devoted to the discussion of duties of the Superintendent of Ships and refers to shipping both inland, costal and on the high seas. The detailed description of the chapter indicates the presence of a vast and valuable commerce with adequate means of transport and shipping regulations.

The Superintendent of ships was an Imperial officer, an administrative chief, who had to examine the accounts relating to navigation not only on oceans and mouths of rivers but also on lakes, natural or artificial and rivers in the vicinity of fortified cities. The superintendent of ships had to observe the customs prevalent in commercial towns and the orders of Port Municipal authorities. In those large rivers which could not be forded even during the winter and summer seasons, there were launched large boats provided with a captain, a steerman and servants to hold the sickle and the rope and to pour out water. Small boats were to be launched in those small rivers which

- (१) ततो विदितवेद्यात्मा पाण्डवानां हिते रतः ।
 पलायने मतिं चक्रे कुन्त्याः पुत्रः सहानघः ॥
 ततो वातसहो नावं यन्त्रयुक्तां पताकिनीम् ।
 ऊर्मिक्षमां बद्धां कृत्वा कुन्तीमिदमुवाच ह ॥
 इयं वारिपथे युक्ता तरङ्ग पवनक्षमा ।
 नौर्यया मृत्युपाशात् त्वं सपुत्रामोक्षसे शुभे ॥
 तच्छ्रुत्वा व्यथिता कुन्ती पुत्रः सह यशस्विनी ।
 नावमारुह्य गंगायां प्रययौ भरतर्षभ ॥

(म० जतुगृहपर्व अ० १४०)

समद्रमहिषीं गङ्गा सारसक्रीडचनादिताम् ।
 आससाव महाबाहुः भृङ्गबेरपुरं प्रति ॥
 अनुराग्य सुमन्त्रं च सबलं चैव तं गुहम् ।
 आस्थाप्य नावं रामस्तु क्षीप्रं सलिलमत्यगात् ॥

(रा० अयोध्याकांड)

overflow during the rainy season. Fording or crossing the river without permission was prohibited, lest traitors may cross them and escape. When a person crossed the river outside the proper place and in unusual times, he was to be punished and also the person who crossed a river at the usual place and time without permission. According to Kautalya, boats were to be launched between the months of Asadha, the first seven days being omitted, and Kartika; the evidence of a ferryman was to be given and the daily income was to be remitted¹. Panini's reference to different kinds of trade routes gives us an idea of the forms of transport prevalent in those days. Panini has referred to various kinds of routes e.g. Varipath, Sthalpath, Rathpath, Karipath, Ajapath, Sankulapath, Rajpath, Sinhapath, Hansapath and Devapath. Hansapath and Devapath most probably related to air transport².

Air transport which has the advantage of fast speed both over land and sea has acquired great importance specially in the 20th century. Though plans for different forms of transport cannot be considered in isolation and the conception that different forms of transport are parts of an integral system has developed gradually, yet air transport has a special role to play in the world of to-morrow. Scientists in the United States of America and the Soviet Union are planning inter-planetary flights to Mars and Venus in a decade or so. Scientific knowledge may, sometimes later, make it possible for people to fly to the Moon. But air transport cannot be regarded as a phenomenon of the modern times alone. The sublimity of the Vedas is proved even in this sphere and several hymns of the Rigveda give fullest indication of the development of the means and methods of air transport in ancient India. Sukta thirty-four of Rigveda Mandal I contains hymns which throw light on

- (१) नावाध्यक्षः समद्रसंयाननदीमुखतरप्रचारान्वेवसरोविसरोनदीतरांश्च स्थानीयो-
दिववेक्षेत ॥ तद्वेलाकूलग्रामाः क्लृप्तं दद्युः ॥ पत्तनाध्यक्षनिबन्धं पण्यपत्तनचारित्रं
नावाध्यक्षः पालयेत् ॥ मूढवाताहतानां पितृवानुगृह्णीयात् ॥ उदकप्राप्तं
पण्यमश्लुकमर्धश्लुकं वा कुर्यात् ॥ शासकनियामकदात्ररश्मिप्राहकोत्सेवकाधिष्ठि-
ताश्च महानावो हेमन्तग्रोहमतार्यासु महानदीषु प्रयोजयेत् ॥ अद्रकाः क्षुद्रिकासु
वर्षास्त्राविणीषु ॥ अकालेऽस्तौ च चरतः पूर्वं साहसवण्डः ॥ काले तीर्थे
चानिसृष्टतारिणः पादोनसप्तविंशतिपणः तरात्ययः ॥

सप्ताहवृत्तामाषाढौ कार्तिकौ चान्तरा तरन् ।

कार्मिकप्रत्ययं दद्यान्नित्यं चाङ्गकमावहेत् ॥

(की० १।२८)

(२) India as known to Panini—Dr. V. S. Agrawal.

the technique and desirability of the development of air transport¹. In the same Mandal of Rigveda, Sukta 118 and 183 may be interpreted to imply the type and speed of a plane which may move faster than the mind of man does. In the fourth Mandal also of Rigveda, there is a reference to the fast moving planes in high skies.

The Ramayan and the Mahabharat have references which indicate that air transport was known in those days though there is no detailed description of the development of air routes in the country. Rama, having achieved his objective in the battle against Ravana, asked Vibhishan to bring quickly the Vimana so that he might reach back Ayodhya in the shortest possible time as Bharata was anxiously waiting for his return and living a life of austerity and negation. The Vimana was wrought in gold and fleet like the mind. Rama ascended that peerless Vimana with noble Vaidehi accompanied by his valorous bowman and brother Lakshman. The Vimana was spacious enough to provide seats to all the lieutenants and companions of Rama comfortably and without overcrowding. This Vimana was named Pushpak which originally belonged to Kuber and was sent to him by Rama after he had reached Ayodhya². In the Vana Parva of the Mahabharat, Sri Krishna narrated the details of the fight against King Shalva when he

(१) त्रयः पवयो मधुवाहने रथे सोमस्य देनामन् विश्व इद्विभुः । त्रयः स्कम्भासः स्कभितास
आरभेत्रिनेवत् यावत्स्त्रिर्वदिवनादित्वा ॥ त्रिर्नोअदिवना यजता द्विवेदिवे परि
त्रिधातुपृषिबोमशायतम् । तिस्रो नासत्या रथ्या परावत आत्मेव वातः स्वसराणि
गच्छतम् ॥ (ऋ० १।३४)

आ वां रथो अदिवना इयेनपत्वा सुमलीकः स्ववां यात्वर्वाङ् ।

यो मर्त्यस्य मनसो जवीयान्त्रिबन्धुरो वृषणा वातरंहाः ॥

(ऋ० १।११८)

तं यञ्जायां मनसो यो जवीयान्त्रिबन्धुरो वृषणा यस्त्रिचक्रः ।

येनोपयायः सुकृतो दुरोणं त्रिधातुना पतथो विनपणोः ॥

(ऋ० १।१८३)

(२) पुष्पकं नाम भद्रं ते विमानं सूर्यं वचंसम् ।
मम भ्रातुः कुबेरस्य रावणेन बलीयसा ॥
तेनप्राऽऽप्रस्यसि यानेन त्वम् अयोध्यां गतज्वरः ॥
उपस्थापय मे शीघ्रं विमानं राक्षसेश्वर ।
कृतकार्यस्य मे वासः कथं स्याद इह संगतः ॥
आरु-रोह तदा रामम् तद् विमानं मनोजवम् ।
अङ्गोऽऽवाय वंदेही लज्जमानां यशस्विनीम् ॥
लक्ष्मणेन सहभ्रात्रा विक्रान्तेन धनुषमता ।
अब्रवीन् च विमान-स्थः काकुत्स्थः सर्ववानरान् ॥

(रा० युद्धकांड)

attacked Dwaraka with his mighty plane named 'soubh'. The Soubh plane was as big as a city and very effective in a war against enemies¹. Arjun saw thousands of extraordinary planes when he reached Indraloka with Indra's charioteer Matali. This reference in the Vanaparva-Indralokabhigaman Parva is a clear proof of the use of planes for going to great heights². A common belief is that the Kali age started in India after the great and devastating battle of the Mahabharat and many sciences were lost to the people of this country. The science of air navigation was forgotten by the people of this land and the West revived it on the beginning of the 20th century. It has been expanding since then at a very rapid pace and as already pointed out that both America and Russia are vying with each other in extending and expanding the scope and utility of this form of transport. India, with its inherent potentialities, and with a rich background will not lag behind in the development of this form of transport and in periods of depression would derive inspiration from the glories of its ancient past.

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- (१) शात्वस्य नगरं सोभं गतोऽहं भरतर्षभ ।
निहन्तुं कीरवश्वेष्ठ तत्र मे क्षणं कारणम् ॥
स तत्र योधितो राजन् कुमारं विष्णुपुङ्गवः ।
आगतः कामगं सोभमारुह्य नृशंसवत् ॥

(म० वनपर्व, अ० १४)

- (२) दशवाजिसहस्राणि हरीणां वातरंहसाम् ।
बहन्ति यं नेत्रमुखं विषयं मायामयं रथम् ॥
बदशाब्धुतरूपाणि विमानानि सहस्रशः ।
न तत्र सूर्यः सोमो वा द्योतते न च पावकः ॥

(म० वनपर्व, अ० ४२)

CHAPTER X

WEALTH, ITS ACCUMULATION AND DISTRIBUTION

जगन्मा ते वक्षिणमिन्द्र हस्तं वसूयवो वसुपते वसुनाम् ।
विद्वमाहि त्वा गोपति क्षुर गोनामस्मभ्यं चित्रं वृषणं रयिं दाः ॥
स्वायुषं स्ववसं सुनीषं चतुः समुद्रं वरुणं रयीणाम् ।
चकुरत्यं शंस्यं भूरिवारमस्मभ्यं चित्रं वृषणं रयिं दाः ॥

(ऋ० १०।४७।१-२)

प्रजापतेन त्वदेतान्यन्यो विद्वा जातानि परि ता बभूव ।
यत्कामास्ते जुहुमस्तप्नो अस्तु वयं स्याम पतयो रयीणाम् ॥

(ऋ० १०।१२।१०)

ईशावास्यमिव सर्वं यद्विक्रञ्च जगत्यां जगत् ।

तेन त्यक्तेन भुञ्जीथा मा गृधः कस्यस्विद्धनम् ॥ (यजु० ४०-१)

धनमाहुः परं धर्मं धने सर्वं प्रतिष्ठितम् ।

जीवन्ति धनिनो लोके मृता ये त्वधना नराः ॥

(म० उद्योगपर्व अ० ७२)

आपदर्थं धनं रक्षेच्छीमतइव किमापदः ।

कदाचिच्छलिता लक्ष्मीः संक्षितोऽपि विनश्यति ॥ (चा० नी० १।७)

अर्थस्य पुरुषोदासोदासस्तत्त्वार्थानकस्य चित् ।

अतीर्थाय ते तैर्बसर्वदायत्नमास्थितः ॥

(शु० नी०, ४।१२८३)

The Concept Of Wealth

Economics has, sometimes, been called the science of wealth and wealth regarded as a synonym of economic goods. There has been a good deal of difference of opinion on the concept of wealth. The Mercantilists thought of wealth primarily as gold and silver. Quesnay, the father of the Physiocratic school, believed that wealth does not consist in the quantity of money a nation can store up, but in the quantity of raw materials available for purposes of men. To the Physiocrats, the increase in wealth of a community consisted in the surplus of agricultural and mineral products over their cost of production. The great importance of the concept of wealth can be judged from the fact that Adam Smith, known as the father of modern economics, devoted and named his whole work as 'An Inquiry into the nature and causes of the Wealth of Nations'. According to John Stuart Mill, wealth consisted of all useful

or agreeable things which possessed value in exchange, were material and were susceptible to accumulation. Like Say, also, he included talents and skills in the concept of wealth. Karl Marx agreed that wealth in its economic sense consisted of an accumulation of commodities. Material possessions were not the only thing of value, but they were the necessary pre-requisites for achieving non-material values¹.

As far back as records of human history are available, there is ample evidence to show that every society has spent much of its time and thought upon securing those material things which support life and increase its value. Search for some kind of the most valuable possessions, otherwise called wealth, has always been the quest of mankind. In spite of this, Western thinkers have widely differed in their concept of wealth. Our ancient concept of wealth is not so narrow and takes into consideration the co-relation between wealth, want and welfare. Prof. K.T. Shah has quoted a sloka in his 'Ancient Foundations of Economics' to denote the wide range of meaning of different terms used for wealth². It appears that in Vedic days, wealth was counted in cattle (specially cows), horses, heroes and good manpower in general. Several hymns of the Rig and Atharva Veda confirm this concept of wealth in those days³. The historical accounts of the coming of Aryans to India and their fights against the aboriginal tribes contribute to the view that they stood more in need of possessions mentioned above and that is why they regarded them as wealth. But this does not mean that the Vedic Aryans did not know the use of gold and diamond. A prayer in the Bhumi Sukta of Atharva Veda refers to such treasure as valuable possessions. In the Purusha Sukta, the use of the words—Shri and Lakshmi refers to different types

(1) Basic Teachings of the Great Economists—John W. McConnell.

(२) द्रव्यं वित्तं स्वापतेयं रिक्थमक्षयं धनं वसु ।
हिरण्यं द्रविणं सुस्मिन्मर्त्यं विभवा अपि ॥ (अमर कोष)

(३) सनद्वाजं विप्रवीरं तरुणं धनस्पतं शशुर्वांसं सुबक्षम् ।
वस्युहन् प्रभिदमिन्द्र सत्यमस्मभ्यं चित्रं वृषणं रयि दाः ॥

(ऋ० १०।४७।४)

अश्ववावन्तं रथिनं वीरवन्तं सहस्त्रिणं शतिनं वाजमिन्द्र ।

भद्रद्रातं विप्रवीरं स्वर्षामस्मभ्यं चित्रं वृषणं रयि दाः ॥

(ऋ० १०।४७।५)

ओ३म् स्तुता मया वरदा वेदमाता प्रचोदयन्तां पावमानां द्विजानाम् ।

आयुः प्राणं प्रजां पशुं कीर्तिं द्रविणं ब्रह्मवर्चसम् । मह्यं दत्त्वा व्रजत ब्रह्मलोकम् ॥

(अथर्व० १९।७।११)

of valuable possessions of an individual¹. Manu has used different words in different places to convey the meaning and concept of wealth. He has referred to Artha, Dhana, Sva, Vitta, Riktha, Dravya, for purposes of expressing different forms of wealth. In chapter VII of his smṛiti, he has pointed out that wealth in the form of chariots, horses, elephants, chhatra, cash, foodgrains, cattle and women should be owned by one who wins them in a battle².

It is interesting to note Vyas's concept of wealth as narrated by king Yudhishtira when he began the game of dice with Shakuni who was an expert in dicing. The first things pointed out as wealth, both by Duryodhan and Yudhishtira, were precious diamonds and necklaces studded with gold. Yudhishtira then pointed out that he could stake several boxes full of thousands of 'nishkas' (gold coins), his treasure and other types of gold which he regarded as his wealth. When all this was lost, Yudhishtira suggested to bet his famous chariot-'Jaitra Ratha', thousands of male and female slaves who were well fed, well clad and were expert in 64 arts. The long description of Yudhishtira's wealth as contained in the 'Dyut Parva' of the Mahabharat includes many multi-coloured swift horses, a thousand elephants tied with golden ropes and ornamented with golden necklaces, several beautiful chariots and other conveyances, thousands of heroes of all varnas who were won by Shakuni in the game of dice. The list of wealth was continued by Yudhishtira to include large amounts of bar gold, good oxen and milch cows, sheep, goats, villages and cities of his kingdom. Ultimately he staked his brave brothers, his beautiful and talented Draupadi probably under the impression that they too were his wealth³. According to Panini, the wealth of an individual was indicated in terms

- (१) गवामश्वानां वयसश्च विष्ठा भगं वचः पृथिवी नो दद्यात् ॥
निधिं विभ्रती बहुधा गुहा वसु मणिं हिरण्यं पृथिवी दद्यात् ॥
(अथर्व० १२।१)
- अश्वत्ते लक्ष्मीश्च पत्न्या बहोरात्रे पादर्वे नक्षत्राणि रूपमश्विनो व्यासम् ॥
इक्ष्वाणिषाणामुंसइषाण सर्वलोकं सइषाण ॥ (पु० सू० यजुर्वेद)
- (२) रथाश्च हस्तिनं छत्रं धनं धान्यं पशून् स्त्रियः ॥
सर्वद्रव्याणि कुप्यं च यो यज्जयति तस्य तत् ॥ (मनु० ७।१६)
- (३) मन्ति मे मणयश्च वनानि सुबहूनि च ।
मत्सरश्च न मेऽर्षे जयस्त्वं दुरोधरम् ॥
अयं बहुधनो राजन् सागरावर्तसम्भवः ।
मणिर्हारीत्तरः श्रीमान् कनकोत्तमभूषणः ॥

शेषे अगले पृष्ठ पर

of gold and silver. He has referred to 'Naishka-Satika', one whose wealth amounted to 100 Nishkas of gold and 'Naishka-Sahasrika' i.e. one whose wealth amounted to 1,000 Nishkas¹.

Kautalya has, in his Arthashastra, referred to diminution of gold and grains as loss of wealth². He placed special emphasis on gold and grains but did include other valuable possessions in his concept of wealth. There is now a general agreement about the nature of this fundamental concept. When the word 'Wealth' comes to our mind, we at once think of cash, jewellery, valuable articles, lands, buildings, machinery, furniture, mortgage-rights, stocks, shares and so on. All these commodities are objects of human desire or possess utility. The essential attributes of wealth are thought to be utility, scarcity and transferability. It may be noted that ancient Indian concept

सन्ति निष्कसहस्रस्य भाण्डिन्यो भरिताः शुभाः ।
 कोशो हिरण्यमक्षयं जातरूपमनेकशः ।
 एतद् राजन् मम धनं तेन दीव्याम्यहं त्वया ॥
 जत्रो रथवरः पुण्यो मेघसागरनिः स्वनः ॥
 एतद् राजन् धनं मह्यं तेन दीव्याम्यहं त्वया ॥
 शतं दासीसहस्राणि तरण्यो हेमभद्रिकाः ।
 कम्बुकेश्वरधारिण्यो निष्ककण्ठ्यः स्वलंकृताः ॥
 महाह्रमाल्याभरणाः सुवस्त्राश्चान्वनोक्षिताः ।
 मणीन् हेम च बिभ्रत्यश्चतुः षष्टिविशारदाः ॥
 एतद् राजन् मम धनं तेन दीव्याम्यहं त्वया ॥
 एतावन्ति च दासानां सहस्राण्युत सन्ति मे ।
 प्राज्ञा मेधाविनो दान्ता युवानो मृदुकुण्डलाः ।
 एतद् राजन् मम धनं तेन दीव्याम्यहं त्वया ॥
 सहस्रसंख्या नागा मे मत्तास्तिष्ठन्ति सोढव ।
 हेमकक्षाः कृतापीडाः पद्मिनो हेममालिनः ॥
 सर्वे च पुरभेत्तारो नवमेघनिभा गजाः ।
 एतद् राजन् मम धनं तेन दीव्याम्यहं त्वया ॥
 गवाश्च बहुधेनुकमसंख्येयमजाविकम् ।
 पुरं जनपदो भूमिरब्राह्मणधनः सह ।
 अत्राह्मणाश्च पुरुषा राजञ्छिष्टं धनं मम ।
 एतद् राजन् मम धनं तेन दीव्याम्यहं त्वया ॥
 पुत्रपुत्रा इमे राजञ्छोभन्ते यैर्विभूषिताः ।
 श्यामो युवा लोहिताक्षः सिंहस्कन्धो महाभुजः ।
 नैव ह्रस्वान न महती न कृष्णा नातिरोहिणी ।
 नीलकुञ्चितकेशी च तथा दीव्याम्यहं त्वया ॥

(म० सभाषर्वाणि सूतपर्व अ० ६०, ६१-६५)

(1) India As Known To Panini—Dr. V.S. Agrawal.

(2) युग्यपुरुषापचयः क्षयः ॥ हिरण्यधान्यापचयो व्ययः ॥ ताभ्यां बहुगुणविशिष्टे ऋभे यायात् ॥
 (की० १।४)

of wealth included all these attributes. It included not only what a man has but also what a man is, because a stock of money or goods on hand may be considered from the economic angle as wealth, but in a larger conception a healthy, well educated, talented and morally upright citizenary should be, in a much truer sense, considered as a store of wealth. Dr. N. N. Law in his book, *Indian History and Culture*, has written that in Europe it was Aristotle who first reached the conception of a special science or art of wealth though he never treated it apart from ethical and political considerations. He divided wealth into three classes—natural, intermediate and un-natural. He believed that true or natural wealth, which was limited in supply, was derived from agriculture and mining, but he placed emphasis on non-material values¹. According to Frederick List, national self-sufficiency and national wealth, as distinct from individual wealth, were more important. He believed that Smith was wrong in confining his work to an analysis of wealth defined in terms of exchange value to the neglect of the productive forces which underlie these forces. The modern economists have made an important issue between the advocates of individual wealth, on the one hand and those who advocate socially held wealth on the other. It has to be emphasised in the end that wealth is a relative term and it is this relationship to men which makes different things wealth. As the problems of wealth, now-a-days, shade into those of value, it is just possible that the concept and questions of wealth may be looked upon in an altogether different way by the economists of to-morrow who live to see a full-fledged age of atomic energy, sputniks, space control and inter-planetary flights.

Accumulation of Wealth

There was individual liberty to earn and accumulate wealth in ancient India. The Vedic literature contains many prayers for the grant of different types of wealth and there are indications for doing away the evils of poverty². Possession and accumulation of wealth is emphasised in the Mahabharat. According to Manu and Vyas, there are several ways of earning

(1) *Indian History and Culture*—Dr. N.N. Law.

(2) अरायि काणे विकटे गिरि गच्छ सदान्वे ।
गिरिम्बिठस्य सत्त्वभिस्तेभिष्ट्वा चातयामसि ॥

and acquiring wealth for an individual¹. Vyas, in the Vana Parva of the Mahabharat, has pointed out the difficulties of acquiring and parting with wealth. He has indicated that many adventurous people risk their lives by diving into the sea in search of pearls and many roam about in dense forests in search of wealth. Many take to agriculture and dairying for earning wealth and there are others who take up professions in distant lands in quest of wealth². There are several references in the Epics to the immense wealth of kings like Ravan, Mandhata, Sagar, Raghu, Yayati, Nahusha, Yudhishtira and others. Productive activity through investment of capital and labour was always regarded essential for earning and accumulating wealth. Speculation and gambling were discouraged as a means of earning wealth. Kautilya has very clearly suggested that wealth will pass away from that childish man who inquires most after the stars; for wealth is the star for wealth; what can the stars do. Capable men will certainly secure wealth after a hundred trials; wealth is bound by wealth just as elephants are bound by counter-elephants. The same views are expressed in the Shanti Parva of Mahabharat³. There are directions against gambling and its evils are clearly depicted in the Rig Veda. Manu has condemned gambling and had suggested the pursuit

- (१) विद्या शिल्पं भूतिः सेवा गोरक्ष्यं विपणिः कृषिः ।
 क्षतिर्भक्ष्यं कुसीवं च दश जीवमहेतवः ॥ (मनु० १०।११६)
 विद्या वार्ता च सेवा च कारुत्वं नाट्यता तथा ।
 इत्येते जीवनापारिजितं मर्त्यानां विहिताः प्रिये ॥
 वाणिज्यं वा यथाकालं कुर्यात् तद्देशयोगतः ।
 मूल्यमर्थं प्रयासं च विचार्यैव व्ययोदयौ ॥
 (म० अनुशासनपर्व, अ० १४५)

- (२) अर्थं च महती तूष्णा स च दुःक्षेन लभ्यते ॥
 परित्यज्य प्रियान् प्राणान् धनार्थं हि महामते ।
 प्रविशन्ति नरा धीराः समुद्रमटवो तथा ॥
 कृषिगोरक्ष्यमित्येके प्रतिपद्यन्ति मानवाः ।
 पुरुषाः प्रेक्ष्यतामेके निर्गच्छन्ति धनाधिनः ॥
 (म० वनपर्व, अ० २५९)

- (३) नक्षत्रमतिपृच्छन्तं बालमर्थोऽतिवर्तते ।
 अर्थो ह्यर्थस्य नक्षत्रं किं करिष्यन्ति तारकाः ॥
 नाधनाः प्राप्नुवन्त्यर्थान्नरा यस्तनूततरपि ।
 अर्थैरर्थाः प्रबध्यन्ते गजाः प्रतिगर्जन्ति ॥ (की० १।४)
 अधनेनार्थकामेन नार्थः शक्यो विधिरितुम् ।
 अर्थैरर्था निबध्यन्ते गर्जन्ति महागजाः ॥
 (म० शान्तिपर्व अ० ८)

of gainful occupations to earn wealth¹. Conquest of wealth in a war was also recognised, if the war was fought for a noble cause. Arjun was known 'Dhananjaya', because he had conquered much wealth but all that conquered wealth was to be used for the 'Rajsuya' sacrifice of king Yudhishtira².

It is, therefore, to be noted that subject to the demands of Ethics, a variety of ways for acquiring wealth have been pointed out in our ancient literature. The acquisition of wealth, the process of its production, consumption and distribution was not supposed to be an end in itself but a most important means to the main objectives of life—achievement of Chaturvarga. Manu's ancient code of moral laws emphasises that purity in acquiring wealth is very important. Vidura upheld the view that wealth arose from virtuous action, increased with carefulness, became permanent with abstinence and observation of rules of good conduct. He was of the view that a person acquiring wealth with unfair means could never be made a witness in a dispute³. Although our ancient literature inculcates a spirit of triumph over poverty, yet there is a clear realisation that one cannot be wise, virtuous and temperate all the time with the master god of mammon and materialism. The concept of the wealthiest man given by Yudhishtira to Yaksha in the Vana Parva of the Mahabharat is of a different type. Yudhishtira pointed out that the wealthiest man is he who keeps his mental balance in pleasure and pain, in adversity and prosperity and is

- (१) अन्ये जायां परि मृशन्त्यस्य यस्यागृधद्वेदने वाज्यक्षः ।
 पिता माता भ्रातर एव मातुर्न जानीमो नयता बद्धमेतम् ॥
 जाया तप्यते कितवस्य हीना माता पुत्रस्य चरतः क्वचित् ।
 ऋणावा विभ्यद्वनमिच्छमानोऽन्येषामस्तमप नवतमेति ॥
 (ऋ० १०।३४)

द्यूतं समाद्वयं चैव राजा राष्ट्राग्निवारयेत् ।
 राज्यान्तकारणायेतो द्वौ द्वौ पृथिवीक्षिताम् ॥ (मन० १।२२१)

- (२) सर्वाञ्जनपदाञ्जित्वावित्तमादाय केवलम् ।
 मध्ये धनस्य तिष्ठामि तेनाहुमौ धनंजयम् । (म० वि० पर्व, अ० ४४)

- (३) सर्वेषामेव शोचानामर्थं शोचं परं स्मृतम् ।
 योऽयं क्षुब्धिं सक्षुब्धिनमुद्गारिः क्षुब्धिः ॥ (मन० ५।१०६)

धीर्मङ्गलात् प्रभवति प्रागल्भ्यात् सम्प्रवर्धते ।
 दाक्ष्यात् तु कुर्वते मूलं संयमात् प्रतितिष्ठति ॥
 सामुद्रिकं बणिजं चोरपूर्वं नतान् साक्षये त्वधिकुर्वीत सप्त ॥

(म० उद्योगपर्व, अ० ३५)

indifferent to the worries of past, present and future¹. Shukra believed that acquisition of wealth was desirable for maintenance of a good wife, a son, a friend and for purposes of charity. There could not be a better use of wealth except that it could be utilised for the service of others². It has been pointed out in the 'Chanakya Niti' that wealth is to be accumulated for periods of emergency, for protection of women, but there is a caution that 'Atma' or self-conscience was always to be protected against women and wealth. Miserly accumulation of wealth without its proper use and charity is discouraged in the Chanakya Niti³. Gandhiji wrote once that Rome suffered a moral fall when it attained high material opulence. The descendants and kinsmen of the royal and divine Krishna too fell when they were rolling in riches. The millionaire and multi-millionaire of the West, these days, is judged indulgently. With him material gain does not necessarily mean moral gain. It is, therefore, suggested in our ancient literature that accumulation of individual wealth should be accompanied by a sense of moral and social welfare. In spite of a strong belief in full efforts for accumulating wealth, a spirit of sacrifice, of the wealth earned for the sake of others, stands high as our ideal. The national economy of any country would be highly improved and better regulated, if a sense of complete social welfare can be inculcated among the rich and they begin to regard themselves as trustees rather than owners of their wealth for national welfare.

(१) तुर्ये प्रियाप्रिये यस्य सुखदुःखे तथैव च ।
अतीतानागते चोभे सर्वे सर्वधनी नरः॥

भूतभयभविष्येषु निःस्पृहः शान्तमानसः ।
सुप्रसन्नः सदा योगी स वै सर्वधनीश्वरः॥

(म० वनपर्व, अ० ३१३)

(२) सुभार्या पुत्र मित्रार्थं हितं नित्यं धनाजनम् ।
दानार्थं च विना त्वन्ते किं धनं च जनंश्चकिम् । (शु० नी०)

(३) आपदर्थं धनं रक्षेद्द्वारान् रक्षेद्धनंरपि ।
आत्मनं सततं रक्षेद्द्वारंरपि धनंरपि ॥

देवं भोग्यधनं धनं सुकृतिभिर्नो सञ्चस्तस्य वै,
अथ कर्णस्य बलेच्च विक्रमपतेरद्यापि कीर्तिः स्थिता ।

अस्माकं मधुवानभोगरहितं नष्टं चिरात्संचितम् ।
निर्वेदादिति नृजपादयुगलं धर्मत्यहो मक्षिकाः ॥

(चा० नी०, अ० १, ११)

Distribution Of Wealth

One of the most striking aspects of modern civilisation is the inequality in the distribution of wealth. The modern economics of distribution deal with the division of the total product of the country among the various agents or factors of production. Distribution of wealth and income can be distinguished in two ways—personal and functional. The functional distribution of wealth in a country in form of rent, wages, interest and profit has acquired greater prominence these days than personal distribution of income and wealth to individuals in the population. The difference between rich and poor is as old as the world, but the conflict of the 'haves' with the 'have-nots' is an outgrowth of the functional distribution of the industrial era. The wealth and luxury of ancient India was not counter-balanced by a host of poor wage earners, as there was no factory system to create complicated labour problems. Agriculture and cottage industries, organised on an elaborate plan, brought subsistence and competence to every family. The relative simplicity of economic life and the social organisation which marked society in those days provide a reasonable explanation for the lack of importance attached to functional distribution of wealth. But the importance of land, labour and capital was fully recognised and the productive organisation of the ancient Aryan society had its own ideology and form. It was an ideology in which moral values predominated. The moral law was a guarantee of protection against starvation and for equitable distribution of wealth. The economic philosophy of Rig Vedic hymns suggested an equitable distribution of food resources of the country. Several hymns of Rig Veda (Madala 10, Sukta 48 and 117) are full of noble sentiments. These hymns emphasise distribution of food and wealth among those who are needy¹.

- (१) अहं भूवं वसुनः पूष्यंस्पतिरहं धनानि सं जयामि शश्वतः ।
मां हवन्ते पितरं न जन्तवोऽहं वाशुषे वि भजामि भोजनम् ॥

(ऋ० १०।४८)

न वा उ देवाः क्षुधमिदृशं ददुस्ताजितमूप गच्छन्ति मृत्यवः ।
उतो रयिः पृणतो नोप दस्यत्युतापृणन्मडितारं न बिन्दते ॥
य आध्राय चक्रमानाय पित्वोऽन्नवात्सन्नकितायोपजंगमश्च ।
स्थिरं मनः कृणुते सेवते पुरोतोच्चिरस मडितारं न बिन्दते ॥
न स सखायो न ददाति सख्ये सच्चाभवे सचमानाय पित्वः ।
अपास्मात्प्रेयास तदोको अस्ति पृणन्तमन्यमरणं चिदिच्छेत् ॥
मोघमस्रं बिन्दते अप्रचेताः सत्यं ज्ञवीमि वष इत्स तस्य ।
नार्यमणं पुष्यति नो सखायं केबलायो भवति केबलादी ॥

(ऋ० १०।११७)

The philosophy of Bhagwat Gita denounces a person who cooks for himself alone and does not share it with others. Such a person is regarded as condemned¹.

Wages

Functional distribution of the total wealth of a country among different agents of production appeared relatively late in every country in the development of economic ideas. In ancient India, there were no problems of a capitalistic economy. Social and economic life was free from clash of interests. With the predominance of moral values, liberal and charitable outlook, a conflict of interest between the propertied and the property-less---the class war of Marxian theory did not arise. The criterion to determine wages was justice---justice based on humanitarian considerations. The determination of wages was not left on the mere forces of demand and supply. Determination of wages has been dealt with in a separate chapter on labour problems, but it may be pointed out here that the ancient Indian concept of wages was primarily a dynamic concept. In modern times, we have come to realise that wages may vary from industry to industry and region to region. The variation was envisaged in our ancient economic thought. The principle of human consideration and social justice was predominant in wage determination. The world is now veering round this precept and we hear a great clamour for human relations in industry. Even the U.N.O. has summoned conferences on this issue. This throws light on the magnificent concept of human considerations in economic life that India's master thinkers had given. It was fully realised by such thinkers that society consisted of different economic groups differentiated from each other by the source of their income. The return which each group received for its services was not a matter of Natural Law but of equity and justice. The process of distribution depended upon the character of social institutions. Landlords and Capitalists could not oppress cultivators and borrowers.

Rent

The Physiocrats believed firmly in private property and accorded an important position to the landlord. An important implication of the 'Tableau Economique' was the special position of the landlord who enjoyed 2/5th of the revenue

(१) यन्नशिष्टाशिनः सन्तो मरुयन्ते सर्वकिल्बिषः ।

भुञ्जते ते त्वघं पापा ये पचन्त्यात्मकारणात् ॥ (भ० गी० ३।१३)

without any labour at all. Private ownership in land was recognised in ancient India, but the state was the ultimate landlord. Manu and other smriti writers have generally recommended a 1/6th share for the state out of the produce of the land. The share of the state could be increased or decreased according to the circumstances prevailing in the country, fertility or unfertility of the land in question. Manu, Vasistha, Vyas and Kautilya have given clear indications in this respect¹. The distinction between economic and contract rent was not developed as there was no problem of a large population and pressure on land.

Interest

Law givers in ancient India realised that capital contributed to the production of wealth. In ancient and mediaeval Europe, interest was generally condemned. The Church forbade the lending of money on interest. Plato and Aristotle criticised it holding that money was barren and it could not breed money. It is, therefore, interesting to note that Dharam Shastras in India permitted and justified interest on loans. The basic justification of interest was found by ancient thinkers in India in the essential productivity of capital or the money loan used for production. Manu made a distinction in the rates of interest chargeable according to the community or the caste of the borrower probably on the belief that the credit-worthiness of a borrower depended upon his character, capacity and status in the society. Manu gave detailed instructions for the regulation of rates of interest. Compound interest was forbidden by Manu but permitted on certain considerations². He forbade usury or

(१) धान्यानामष्टमो भागः षष्ठो द्वादश एव वा ॥ (मनु० ७।१३०)
मात्स्यन्यायाभिभूताः.....

धान्यषड्भागं..... प्रकल्पयामासुः । (कौ० १।१३)

चतुर्यमंशं धान्यानां..... । (कौ० ५।२)

(२) ऋणे देये प्रतिज्ञाते पञ्चकं शतमर्हति ।
अगृह्ये तद्विगुणं तन्मनोरनुशासनम् ॥
वशिष्टविहितां वृद्धिं सृजेद्विषयवर्धनीम् ।
अशीतिभागं गृह्णीयात्साक्षाद्वर्धकः शते ॥
द्विकं शतं वा गृह्णीयात्सतां धर्ममनुस्मरन् ।
द्विकं शतं हि गृह्णीनो न भवत्यर्थकिलिखी ॥
द्विकं त्रिकं चतुष्कं च पञ्चकं च शतं समम् ।
मासस्य वृद्धिं गृह्णीयाद्वर्णानामनुपूर्वशः ॥

शेषे अगले पृष्ठ पर

exorbitant rates of interest for which the Jews in Europe and indigenous bankers in India have been vehemently criticised in recent times. According to Kautalya, an interest of a pana and a quarter per month percent was just. Five panas per month percent could prevail in forestry industry and 20 panas per month percent among sea-traders¹.

Profits

Profit is the reward of the entrepreneur and the study of profits is supposed to be difficult in modern economic analysis. It is difficult to frame a simple theory of profits and the tendency among modern economists is to accept the American view of profits as being the reward of purely entrepreneurial functions which cannot be performed by paid employees. These functions consist of risk taking and uncertainty bearing. The changing world offers limitless opportunities to the far-sighted, daring and clever entrepreneurs to make profits by turning the facts of the situation in their favour. The Mahabharat gives us a clue to the determination of profits². This spirit of enterprise and the share of the entrepreneur in the form of profits was known to Kautalya, though it has been discussed not in connection with business problems, but in connection with the work of an invader. In Book IX chapter IV of the Arthashastra of Kautalya, considerations about loss of men, wealth and profit have been given. Kautalya has suggested that an adventure against an enemy should be taken up when the expected profit outweighs both men and wealth. He has discussed the characteristics of an expected profit into 'receivable', 'repayable' and has given full analysis of these. Pleasing and provoking profits have also been explained. Profits acquired soon, those realised by negotiation, those through expenditure of provisions, those which are of immediate considerable value, those which are harmless, those which are productive of wealth and those which

कृतानुसारादधिका व्यतिरिक्ता न सिध्यति ।
 कुसीदपयमाहुस्तं पञ्चकं शतमहंति ॥
 नातिसावत्सरी वृद्धिं न चाट्ट्टा पुनर्हरेत् ।
 चक्रवृद्धिः कालवृद्धिः कारिता कायिका च या ॥
 चक्रवृद्धिं समाकृत्वा देशकालव्यवस्थितः ।
 अतिकामन् देशकालो न तत्फलमवाप्नुयात् ॥ (मनु० ८।१३९-१५६)

(१) सपादपणा धर्म्या मासवृद्धिः पञ्च शतस्य ॥ पञ्चपणा व्यावहारिकी ॥ दशपणा
 काम्तारकानाम् ॥ विंशतिपणा सामुद्राणाम् ॥ (को० ३।११)

(२) सर्वलोभाः साभिमाना इति सत्यवती भूतिः ।
 संतोषणीयं रूपोऽसि लोभाद् यदभिमन्यते ॥ (म० शांतिपर्व)

are just have been discussed by the great thinker. He has pointed out that obstructions to profit are passion, anger, timidity, mercy, bashfulness, living like one who is not an Arya, haughtiness, pity, desire for the other world, strict adherence to virtuous life, deception, neediness, envy, negligence of what is at hand, generosity, want of faith, fear, inability to endure cold, heat and rain, and faith in the auspiciousness of launar days and stars¹.

Equitable distribution

The average citizen finds little satisfaction in the economics of distribution unless it be based on certain sound principles. The economic consequences of the inequalities in wealth and income are extremely important, because they are concerned with the total welfare of a nation. In addition to its effects upon economic processes directly, the unequal distribution of wealth has serious implications for the social structure as a whole. The vast differences in wealth and income these days, in the world as a whole, have divided society into competitive groups. The ruthless competition for an increasing share of the world's economic goods is the dynamic force of modern civilisation. The continued existence of rich and poor even in economically favoured nations is a clear evidence of the persistence of the problem of personal distribution. A large number of people in all countries are dissatisfied with the present economic and social order. It is believed that in the United States of America, the richest two percent of the American population owns forty percent of the total national wealth, while the poorest sixty five percent own only sixteen percent of the wealth. It was because of such disparities that Karl Marx contended for class struggle. The cries of liberty, equality and fraternity of the French Revolution are heard again in various parts of the world. The class struggle as well as the struggle among individuals can be avoided if attention is given to the directions of Atharva Veda to earn wealth with hundred hands,

(१) आदेयः प्रत्यादेयः प्रसादकः प्रकोपको ह्रस्वकालस्तनुक्षयोऽल्पध्ययो महान्वृद्धयदयः कल्यो धर्म्यः पुरोगश्चेति लाभसंपत् ॥ तुल्ये लाभे देशकालो शक्त्युपायो प्रियाप्रियो जवाजवो सामीप्यविप्रकषो तदात्मानुबन्धो सारत्वसातत्यं बाहुल्यं बाहुगुण्यं च विमृश्य बहुगुणयुक्तं लाभमादधीत ॥

लाभविघ्नाः—कामः कोपः साध्वसं कारुण्यं ह्योरनार्यभावो मानः सानुक्रोशता परलोकापेक्षा दात्मिकत्वमत्याशित्वं वैन्यमसूया हस्तगतावमानो दोरात्मिकमभिश्वासो भयमनिकारः शीतोष्णवर्षाणिमाश्रम्यं मङ्गलतिथिनक्षत्रेष्टित्वमिति ॥ (को० ९।४)

but to distribute the same with one thousand hands¹. Disparities between the rich and the poor and between advanced and under-developed countries have to be reduced, because the imbalance is likely to disturb the peace of the world. In the last ten years, particularly since the last war, a new consciousness about this gap between the rich and poor countries has developed. A positive approach is needed to reduce this gap. This may be done by governmental intervention and political democracy. Captains of industry and business magnates have to be convinced in our country that all the wealth in the cities of Bombay or Calcutta could not be of any indication of the abject poverty of millions of Indians living in villages. They have to be made conscious of the provision of amenities to the poor, better education and more health facilities to them.

All progressive states have taken steps for reduction of inequality of incomes in the way best suited to them. In this process, no particular approach need be stuck to, because from time to time we may have to adopt different methods to achieve our objective. In any way, the instructions of the Vedas should guide us in bringing about a fair and equitable distribution of wealth². It must be noted that though the hymns of the Vedas suggest equality, yet do not support absolute equality, because of the basic fact that men are not equal in their capacity, calibre, character, aptitude and outlook. Some hymns of Rigveda point out that men appear to be equal in the possession of eyes, ears and other limbs of the body, but they are quite different

(१) ज्ञत हस्त समाहर सहस्र हस्त संकिर ।
कृतस्य कार्यस्य चेह स्फाति (ममिति) समावह ॥ अथर्व० ३।२४।५)

(२) समानी प्रपा सह वो अन्नभागः समाने योक्त्रे सहवो युनिजिम ।
तस्यञ्चोऽग्निं सपर्यतारा नाभिमिवाभितः ॥ (अथर्व० ३।३०।६)

ये समानाः समनसो जीवा जीवेषु मामकाः ।
येषां श्रीर्मयि कल्पतामस्मिल्लोके ज्ञतं समाः ॥ (यजु० १९।४६)

सहृदयं सामनस्यमविद्वेषं कुणोमि वः ।
अग्नौ अन्यमभि हृतं वत्सं जातमिवाग्न्या ॥ (अथर्व० ३।३०।१)

समानी व आकृतिः समाना हृदयानि वः ।
समानमस्तु वो मनो यथा व सुसहासति ॥ (ऋ० १०।१९१।४)

समानो मन्त्रः समितिः समानी समानं मनः सह चित्तमेवाम् ।
समानं मन्त्रमभि मन्त्रये वः समानेन वो हविषा जुहोमि ॥

(ऋ० १०।१९१।३)

in their physical, mental and spiritual faculties¹. Hence equitable distribution of wealth is desirable but absolute equality cannot be achieved. The extent of inequality of incomes prevalent in the U.S.S.R. is, in certain cases, as great as that in a capitalist country. Payment is made there according to the social value of a particular group. Average workers are paid reasonably to maintain a decent standard, but men and women of outstanding merit are given much higher emoluments in recognition of their services to the nation. The real solution of the problem of distribution, therefore, lies in the avoidance of two extremes of old type of capitalism and wholesale blind communism. This has been our tradition for centuries and the same can be followed with wisdom in the new and dynamic economic set-up of the country.



(१) अक्षयवन्तः कर्णवन्तः सखायो मनोजवेष्टवसमा बभूवुः ।
आवचनास उपकक्षास उत्वेह्नुवा इव स्नात्वा उत्वे बभूवुः ॥
(ऋ० १०।७१।७)

समो चित्तस्ती न समं विविष्टः सम्मातरा विम्र समं बुहाते ।
यमयोदिवस्र समा वीर्याणि ज्ञाती चित्तस्ती न समं पूनीतः ॥
(ऋ० १०।११७।९)

CHAPTER XI

MONEY, CURRENCY AND BANKING

शतं राज्ञो नावमानस्य निष्काञ्छतमश्वाग्रयतान्सह आवम् ।

शतं कक्षीर्वा असुरस्य गोनां दिवि भवोऽजरमा ततान् ॥

(ऋ० १।१२६।२)

वरणानि दश ज्ञेयः शतमानस्तु राजतः ।

चतुः सौवर्णिको निष्को विज्ञेयस्तु प्रमाणतः ॥ (मनु० ८।१३७)

सन्ति निष्कसहस्रस्य भाण्डिन्यो भरिताः शुभाः ।

कोशो हिरण्यमक्षयं जातरूपमनेकशः ॥

(म० छतृपर्व, अ० ६१)

रूपदर्शकः पणयात्रां व्यावहारिको कोशप्रवेदयां च स्थापयेत् ॥

(को० (२।१२)

Nature Of Money

The modern mechanism of Exchange includes five M's—money, markets, merchants, merchandise, means of transport and communication. As regards money, no extended and detailed argument is needed to convince members of the modern economic system that money is a widely used economic instrument. Virtually every one employs it daily in his business and personal transactions and uses it as a unit for evaluation and accounting. All media of exchange and payment, whose acceptance the law requires in discharge of debts, may be properly called money. Functions of money, in modern economy, are summed up in a couplet as given here :—

‘Money is a matter of functions four,

A medium, a measure, a standard and a store’.

No proper social organisation could exist in the absence of some form of money. In very early times, primitive societies might have done without money, but the introduction of the functional division of labour by the Vedic Aryans must have given rise to some important unit of exchange and value. The exchange of

commodities on the principle of barter seems to have been in vogue from very early times. In the Vana-Parva of the Mahabharat, there is a reference to the exchange of weapons between Indra and Karna on the principle of Barter when Karna agreed to exchange his Kundala and Kavach for Indra's Amogha Shakti¹. In the Shanti Parva, it is recorded, Bhishma explained to Yudhishtira the chief characteristics of exchange by barter and pointed out that such exchanges had been the age-old traditions of sages and other good people in general. But such exchanges could be regarded as justified only when they were voluntary and not forced on any party to the exchange².

The difficulties of barter gave rise to some common measure of value and all sorts of commodities have been used as this common measure of value, differing according to the particular stage of economic development of a community or country. The introduction of money economy in place of kind seems to be very old in India. Though cow was recognised as an unit of value for purposes of exchange in Vedic days, yet there were other recognised units of value such as Nishka, Shatman and Pana. There are references in Vedic hymns and in the Mahabharat to 'Nishka' as a sort of gold coin used in those days³. Panini has referred to barter as 'Nimana' and it has been pointed out that the range of articles covered by barter mostly

- (१) बर्मणा कुण्डलाभ्यां च शक्तिं मे देहि वासव ।
अमोघां शत्रुसंघानां घातिनीं पृतनामुक्ते ॥
कुण्डले मे प्रयच्छस्व बर्म चंब शरीरजम् ।
गृहाण कर्णं शक्तिं त्वमनेन समयेन च ॥

(म० वनपर्व, अ० ३१०)

- (२) वयं सिद्धमशिष्यामो भवान् साधयतामिदम् ।
एवं संबीक्ष्य निमयेन्नाबर्मोऽस्ति कथंचन ॥
अत्र ते वर्तयिष्यामि यथा धर्मः सनातनः ।
व्यवहारप्रवृत्तानां तस्मिन्बोधं युधिष्ठिर ॥
भवतेऽहं दधानीबं भवानेतत् प्रयच्छतु ।
रुद्धितो वर्तते धर्मो न बलात् सम्प्रवर्तते ॥
इत्येवं सम्प्रवर्तन्ते व्यवहाराः पुरातनाः ।
ऋषीणामितरेषां च साधु चैतदसंशयम् ॥

(म० शान्तिपर्व, अ० ७८)

- (३) अहंनिर्भाषि सायकानि चत्वारहस्रिकं यजतं विद्वक्पुम् ।
अहंनिर्भाषं दयसे विद्वदमर्भ्यं न वा ओजीयो वद त्वदस्ति ॥

(ऋ० २।३३।१०)

आस्थाय वीराः सहिता वनाय प्रतस्थिरे भूतपतिप्रकाशाः ।

हिरण्यनिष्कान् वसनानि गादथ प्रदाय शिक्षाक्षरमग्नविभूषयः ॥

(म० वनपर्व, अ० २३)

concerned simple things of ordinary use. He has also referred to 'Vasana' or a piece of cloth as a medium of exchange. There is also reference to articles purchased for one unit of cow and bigger transactions were negotiated for five cows or even more than that. Coined money was not unknown and Panini has referred to both gold and silver coins including Nishka, Pana, Karshapana, Pada and Masha¹. Under these conditions, it is impossible to ignore the presence of money economy and the familiarity of the people with its working in ancient India.

System of Coinage And Currency

As early as Rig Veda, traces are found of the use of 'Nishka' as a sort of currency. The Shatapath Brahman refers to a Nishka of gold. Manu has given the measure of Nishka as equal in weight to four suvarnas. According to the Mahabharat, wealth was measured in terms of Nishka. King Rantideva gave thousands of Nishkas (gold coins) in charity². It is difficult to say whether 'Nishka' was purely a gold coin or had some alloy with it, but Nishka had its sub-multiples. To perform its functions adequately, currency system must be properly organised, and to achieve this end under metallic standard, the value of the currency unit is generally fixed in terms of one or two metals. Under metallic currency, coins are pieces of metals of particular fineness and weight stamped with the symbols of the government of the country. Metallic currency may be full-bodied coins or token coins. Before 1893, the Indian Rupee was a full-bodied coin and since then it has practically been a token coin though working as the standard coin of the country. An analysis of the relative measures of copper, silver and gold given by Manu in chapter VIII of his smriti must have been the basis for coinage of both standard and token coins of the country in those days³. According to the Artha Shastra of Kautilya, the

(1) India as known to Panini—Dr. V. S. Agrawal.

(2) ब्राह्मणेभ्यो ददन्निकान् सोवर्णान् स प्रभावतः ।
 तुभ्यं निष्कं तुभ्यं निष्कमिति ह स्म प्रभाषते ॥
 तुभ्यं तुभ्यमिति प्रादन्निकान् निष्कान् सहस्रशः ।
 ततः पुनः समाश्वास्य निष्कानेव प्रयच्छति ॥
 सहस्रशश्च सोवर्णान् दूषभान् गोदानुगान् ।
 साष्टं शतं सुवर्णानां निष्कमाहुर्धनं तथा ॥ (म० ब्रौणपर्व—अ० ६७)

(3) लोकसंख्यवहारार्थं याः संज्ञाः प्रथिता भूवि ।
 तान्निरूप्यसुवर्णानां ताः प्रवक्ष्याम्यशेषतः ॥
 जालान्तर्गते भानौ यत्सूक्ष्मं दृश्यते रजः ।

(शेष अगले पृष्ठ पर)

Superintendent of mint was to carry on the manufacture of silver coins—made up of four parts of copper and one-sixteenth part of any one of the metals-tikshna, tripu, sisa and anjana. The king reserved the right of coining and other work in silver and copper, which was executed by his officials on behalf of those who brought their raw metal. Silver coins were to be manufactured in units of a Pana, half a Pana, a quarter and one-eighth Pana¹. Copper coins made up of four parts of an alloy were to be in units of a Mashaka, half a Mashaka, Kakani and half a Kakani. The examiner of coins was to regulate currency both as a medium of exchange and as legal tender admissible into the treasury. The premia levied on coins paid into the treasury was to be eight percent, known as rupika, five percent known as vyaji, one-eighth pana percent as parikshika, besides a fine of twenty-five panas to be imposed on offenders other than the manufacturer, the seller, the purchaser and the examiner². Kautalya has not discussed the manufacture of gold coins by the superintendent of mint. He has pointed out in chapter XIII (Book II) that if one to sixteen kakanis of gold in a suvarna (of sixteen mashakas) are replaced by one to sixteen kakanis of copper, so that the copper is inseparably alloyed with the remaining quantity of gold, the standard of the purity of gold will be obtained³. This reference may be an indication for the process of manufac-

प्रथमं तत्प्रमाणानां त्रसरेणुं प्रचक्षते ॥
 त्रसरेणवोऽष्टौ विज्ञेया लिखंका परिमाणतः ।
 ता राजसर्वपस्तिस्त्रस्ते त्रयो गोरसर्वपः ॥
 सर्वपाः षड्व्यवो मध्यस्त्रियवं त्वेककुण्डलम् ।
 पञ्चकुण्डलको मावस्ते सुवर्णस्तु षोडश ॥
 पलं सुवर्णाश्चत्वारः पलानि घरणं दश ।
 द्वे कुण्डले समघृते विज्ञेयो रौप्यमावकः ॥
 ते षोडश स्याद्वरणं पुराणद्वयं राजतः ।
 कार्षापणस्तु विज्ञेयस्तान्निकः काविकः पणः ॥
 घरणानि दश ज्ञेयः शतमानस्तु राजतः ।
 चतुः सोवर्णिको निष्को विज्ञेयस्तु प्रमाणतः ॥

(मनु० ८।१३१-१३७)

- (१) लक्षणाध्यक्षश्चतुर्भगिताञ्च रूप्यरूपं तीक्ष्णत्रपुसीसाञ्जनानामन्यतमं मावबोजयुक्तं कारयेत् पणमर्धपणं पादमष्टभागमिति ॥ (कौ० २।१५)
- (२) पादाजीवं तान्नरूपं मावकमर्धमावकं काकणीमर्धकाकणीमिति ॥ रूपदशकः पणमात्रां व्यावहारिकीं कोशप्रवेदयां च स्थापयेत् ॥ रूपिकमष्टकं शतम् ॥ पञ्चक शतं व्याजीम् ॥ पारोक्षिकमष्टभागिकं शतम् ॥ पञ्चविंशतिपणमन्ययं चान्यत्र कर्तृकृतविक्रेतुपरीक्षितभ्यः ॥ (कौ० २।१२)
- (३) शुद्धस्यंको हारिद्वस्य सुवर्णो वर्णकः ॥ ततः शुद्धकाकण्युत्तरापसारिता आचुतः सीमान्तादिति षोडशवर्णकाः ॥ सुवर्णं पूर्वं निकष्य पदवाद्वाङ्गीं निकषयेत् ॥ (कौ० २।१३)

turing gold coins, but the absence of a reference for the manufacture of gold coins may be due to the fact that Kautalya was mindful of the economic use of gold and its undesirability for purposes of currency. The units of weights given by Kautalya e.g. one suvarna-masha, one suvarna or karsha, one pala, one silver-masha, one dharana, one dharana of a diamond, ardha-masha, one masha, two mashas, four mashas, eight mashas, one suvarna, two suvarnas, four suvarnas, eight suvarnas, ten suvarnas, twenty suvarnas, thirty suvarnas, forty suvarnas and one hundred suvarnas are an index for determining the metallic contents of both the standard and token coins of those days¹.

The Chairman of the Numismatic Society of India, Prince of Wales Museum Bombay has given a scientific account of the biggest hoard of the Gupta gold coins discovered recently. He has given a comprehensive and critical discussion of all the points connected with the Gupta gold coinage and has surveyed all the earlier theories in the field. A brief discussion of the silver and copper currency of the Guptas is also included and proves that in the Imperial Age of the Guptas, bi-metallism was practised and both standard and token coins were circulating in the country². Both gold and silver were used for the same type of coin is proved by the fact that 'Shatman' was both a gold and silver coin. Manu referred to 'Shatman' as a silver coin, while the Shatpath Brahman indicates it to be a gold coin as well³. It is believed by some scholars that the Shatman was a gold coin equivalent in weight to a hundred 'Krishnalas' and was used as currency among the merchants in ancient India. The term 'Karshapana' is not found in Vedic literature but is referred to by Manu and Panini. Manu refers to 'Karshapana' not as a gold coin, but Panini believed that it was a gold coin⁴. The Karshapana was the name of the silver punch-marked coin which was the standard medium of exchange for a certain period in the currency history of India⁵. Kautalya's Artha Shastra refers to 'Pana' but not to 'Karshapana'. The Pana seems to be

- (१) षाड्यमाषा दश सुवर्णमाषकः पञ्च वा गुञ्जाः ॥ ते षोडश सुवर्णः कर्षो वा ॥ चतुः कर्षं पलम् ॥ अष्टाशीतिर्गौरसर्वपा कप्यमाषकः ॥ ते षोडश धरणम् ॥ शंभ्यानि वा विंशतिः ॥ विंशतितण्डुलं वज्रधरणम् ॥ अर्धमाषकः माषकः द्वौ, चत्वारः अष्टोमाषकाः सुवर्णो द्वौ चत्वारः अष्टौ सुवर्णाः दश, विंशतिः त्रिंशत् चत्वारिंशत् शतमिति ॥ (की० २।१९)

(२) A catalogue of Gupta gold coins—Dr. A. S. Altekar.

- (३) धर्यानि दश ज्ञेयः शतमानस्तु राजतः ॥ (मनु० ८।१३७)
राजतम हिरण्यम दक्षिणा नानाकपयः शतमानम भवति ॥ (शतपथ ब्रा०)
(४) काशपिणस्तु विज्ञेयस्ताम्रिकः काविकः पणः ॥ (मनु० ८।१३६)

(५) India as known to Panini - Dr. V. S. Agrawal.

a token coin while the Karshapana a standard coin. One thing is definite that the ancient system of currency in India recognised gold, silver, copper and certain alloys for purposes of standard and token coins of the country. The word 'Shatman' gives us an idea of a coin which had hundred units of some value either of gold or silver though it was not always the case. May we regard it as a clue to the decimal coinage in ancient India? The coinage system of a country and its reform as and when required is a most vital matter as it touches the life and habits of every individual.

In recent years, the subject of the decimalisation of the coinage has received the close attention of many learned bodies and institutions and has been acclaimed all over the world as the simplest form of coinage making calculations quick and easy. In our modern complicated system of trade and commerce, easy conversion of money is most essential and a decimal system which works in multiples of ten makes the task of conversion easier. It is because of the inherent superiority of decimal coinage over other forms of coinage that the Government of India have introduced this system. The United States was the first to adopt the system with the dollar as the unit. The system has been adopted in 105 out of about 140 countries that issue their own coins. The Decimal coinage in India without its rigidity and its multiples or sub-multiples of ten including 1, 2, 5, 25 and 50 is likely to work well after some time¹. But the administrative machinery of the government of India (Ministry of Finance) is failing to keep pace with the changes that are coming so thick and fast. The decimal coinage was introduced in April, 1957. By now, Naya Paisa and its multiples of two, five and ten ought to have flooded the market, pushing out the old paisa, anna and four-anna (chowanni) pieces. But this has not taken place and the consequence is interminable confusion and quarrel specially in the rural areas of the country. The government have failed to mint and put into the market adequate quantities of new coins; that is why the country's experience with the decimal coinage has been none too encouraging. Even before the new coins have firmly and exclusively established themselves in the market, the Government have announced the introduction of the metric system of weights and measures. The Jute industry was to switch over to the metric system from July 1, 1958. The switch over to the decimal coinage and the metric system of weights and measures has got to take place, but their phasing must be intelligently and carefully made.

(1) Decimal Coinage in India—Ministry of Finance, Government of India.

The modern mechanism of exchange rests mainly on the use of paper money and instruments of credit. Credit plays a dominant role in modern business mainly through the use of Bills of Exchange, Cheques and Drafts. It performs many useful functions for the economic prosperity of a country and is supposed to be a great boon to a modern community. The modern 'Clearing House' is a great institution which the commercial world has invented for itself to facilitate the smooth running of its complicated machinery. It may be pointed out here that some sort of cheques and letters of credit must have been vital factors in ancient Indian economic life. The Indian system of issuing Hundis on birch leaves, which ensured cash payment, is well known to us from very early times. Apart from discharging the function of letters of credit and cheques, these Hundis also helped travellers to get conveniences in cities and towns where they came on business or religious trips. The Hundi System still prevails in India with the most modern Banking methods.

Principles Of Banking

In modern communities, Banks play a great part as creators of money and credit, controllers of its supply and its demand. These institutions perform a large number of useful functions. Banks draw surplus money from the people who are not using it at the time and lend to those who are in a position to use it for productive purposes. Money lending, merchant business and Banking was known in ancient India. The minute regulations as to loans of money and interest thereon could not have occurred in the standard code of Manu and Kautilya's Artha-Shastra, had not money lending been a well known business. The successful functioning of banking business depends upon the character, capacity and capital of the people of a country. Both lenders and borrowers must be honest and fair in their dealings with each other. In the absence of these attributes of character, the business of money lending and borrowing results in many complications and clashes between the parties concerned. Our ancient literature inculcated a spirit of being debt free and to be free from other's obligations. A Rig-Veda hymn exhorts us to discharge all our obligations and to be indebted to none. The Atharva-Veda takes a much wider view in explaining the freedom from debts. It instructs us to be free from all debts in the three worlds¹.

(१) पर ऋणा साबोरथ मरुतानि माहं राजस्य कुतेन भोजम् ।

अवृष्टा इक्षु भयसोदयास आनो जीवाश्चक्षु तासु शाधि ॥ (ऋ० २।२८।९)

अनृणा अस्मिन्नृणाः परस्मिन् तृतीये लोके अनृणाः स्याम ।

ये देवयानाः पितृयानाश्च लोकाः सर्वान् पथो अनृणा आ क्षियेम ॥ (अथर्व० ६।११७।३)

Manu, while discussing the eighteen kinds of disputes to be settled by a king, gave the first place to the settlement of debt repayment¹. It is recorded in the Vana-Parva of the Mahabharat that a happy man is he who is indebted to none inspite of the fact that he may be having the commonest meal once a week². A state of complete self-sufficiency for all individuals and freedom from all debts may be an ideal state, but in reality it is difficult to be achieved. Man from his very birth is burdened with certain obligations towards parents and towards the society.

The earliest form of borrowing was mostly in kind. The use of the word 'Apamitya Dhanya' is as old as the Atharva Veda and is referred to in connection with the borrowing of grain for purposes of consumption. The spirit of Atharva Veda hymn is that one should return whatever grain he borrows for purposes of consumption and thus free himself from debts³. Kautalya, in chapter XV Book II of his Artha-Shastra, has referred to the practice of 'Parivartna', 'Pramityaka' and 'Apamityaka' while discussing the duties of the superintendent of store house. These three words most probably refer to barter, borrowing of grain in times of necessity with no promise to return and borrowing of grain with a promise to return.⁴ The Apamitya arrangement i.e. borrowing of grain with a promise to return a bigger quantity, has been a well recognised practice of rural economy in our country for generations together. Modern banks have developed from very small beginnings. The earliest bankers in Europe were goldsmiths and money-changers. The system of indigenous banking in India is very old and has been in force in our country for many centuries before the science of banking became an accomplished fact in Western countries. Although the ancient methods of banking in India

(१) प्रत्यहं देशद्वष्टंश्च शास्त्रद्वष्टंश्च हेतुभिः ।
अष्टादशसु मार्गेषु निबद्धानि पृथक् पृथक् ॥
तेषामाद्यमृणादानं निक्षेपोऽस्त्वामि विद्वधः ।
संभय च समुत्थानं दत्तस्यानपकर्म च ॥ (मनु० ८।३-४)

(२) पञ्चमेऽहनि वष्टे वा शाकं पचति स्वे गृहे ।
अनृणी चाप्रवासी च स वारिचर मोदते ॥
(म० वनपर्व, अ० ३१३)

(३) इहं च सतः प्रतिवद्यम् एनञ्जीवा जीवेभ्यो नि हराय एवम् ।
अपमित्य धान्यं यज्जगत्ताहमिदं तदग्ने अनृणोभवामि ॥
(अथर्व० ६।११७।२)

(४) कोट्टागाराव्ययः सीताराष्ट्रकयिमपरिवर्तकं प्रामित्यकापमित्यकं तितुनिकाव्य
जातव्यवश्रयायोपस्थानाव्युपलभते ॥
(को० २।१५)

were different from the European ideas of banking, yet it must be recognised that they rendered immense services to the trade and industry of the country.

Incentives For Repayment

Banking business in a country, wheather indigenous or modern, can flourish only when there is honesty and punctuality for repayments of debts borrowed. Both Manu and Yagnavalkya have discussed in detail the methods of repayment of debts. Manu's directions place more emphasis on the duties of lenders while those of Yagnavalkya on borrowers. Yagnavalkya has pointed out the order in which debts must be repaid in case there are many creditors of a debtor. According to Yagnavalkya, the responsibility for the debts borrowed by an individual passed on to his sons and grand-sons in case he was unable to repay the debts in his life time¹. Narad has gone a step further and has pointed out that borrowed debts can accumulate up to hundred crores. According to him, those who do not repay such debts send their fore-fathers to hell and have to become slaves, servant or animals in the house of the creditor². Kautilya has also pointed out that the sons of a deceased debtor should pay the principal with interest. A debt, the payment of which was

- (१) कुसीदवृद्धिर्द्विगुण्यं नास्येति सकृद्बाहुता ।
बाण्ये सदे लवे बाह्ये नातिक्लामति पञ्चतमम् ॥
यः साधयन्तं छन्देन देवयेद्वनिकं नृपे ।
स राजा तच्चतुर्भागं बाण्यस्तस्य च तद्धनम् ॥ (मन० ८।१५१, १७६)

गृहीतानुक्रमाद्वाप्यो धनिनामधर्मणिः ।
दस्वा तु बाह्याणायं नृपतेस्तदनन्तरम् ॥
दीयमानं न गृह्णाति प्रयुक्तं यः स्वकं धनम् ।
मध्यस्थस्वापित चेत्स्याद्वृद्धं न ततः परम् ।
प्रतिपक्षं स्त्रिया देयं पत्या वा सह यत्कृतम् ।
स्वयं कृतं वा यद्वृणं नाम्यस्त्री बातुमर्हति ॥
पितरि प्रोषिते प्रेते व्यसनाभिप्लुतेपि वा ।
पुत्रप्रोत्रांश्रुणं देयस्त्रिहवे साभिभाषितम् ॥ (याज्ञ० २।४२-५१)

- (२) पितुर्वपरते पुत्रा ऋणं दद्याव्यंशतः ।
विभक्ता बाविभक्ता वा यस्तामुद्वृते धुरम् ॥
अतः पुत्रेण जातेन स्वार्थमुत्सृज्य यन्ततः ।
पिता ऋणाम्बोधनीयो यवा न नरकं व्रजत् ॥
तज्जमाधिकमादाय स्वामिने न ददाति यः ।
स तस्य दातो भूयः स्त्री पक्षुर्वा जायते गृहे ॥
याच्यमानं न दीयते ऋणं वापि प्रतिग्रहम् ।
तद्धनं वर्धते तावद्यावत्कोदितं भवेत् ॥

(नारद ३।२, ६, ७, ८)

not limited by time or place or both and for which life or land was pledged, was to be borne by sons or grandsons of the debtor¹. Probably it was because of such instructions of the smritis that the indigenous bankers and money-lenders in India were encouraged to lend when demanded by borrowers. Easy credit which was a good servant became a bad master. The country came in the grip of the mahajan and bonds of debt began to shackle agriculture. Once the peasant was in the cruel clutches of the usurious money lender, he could not hope to get out and the debt became hereditary. The money lender traded in the necessities of the borrower and such developments led to the chronic and hopeless indebtedness of the peasantry in India. This problem has so far defied a solution and it appears that the responsibility for ancestral debts as suggested by the authors of the smritis is now a debatable question in the changed circumstances of the country these days.

Control of Credit

Kautalya was emphatic on the need for public control, regulation and supervision of the credit sector of national economy. He was of the view that relationship between lenders and borrowers was of vital national importance and the nature of the transactions between creditors and debtors was always to be scrutinised. According to him, interest for grains lent in seasons of good harvest was not to exceed more than half when valued in money. Interest on stocks was to be one-half of the profit and was to be regularly paid as each year expired. If it was allowed to accumulate owing either to the intention or to the absence abroad, (of the receiver or payer) the amount payable was to be equal to twice the share of principal. A person claiming interest when it was not due, or representing as principal the total amount of his original principal and the interest thereon, was to pay a fine of four times the amount under dispute. A creditor who sued for four times the amount lent by him was to pay a fine of four times the unjust amount². Interest on debts due from persons who were engaged in sacrifices which took a long

(१) प्रेतस्य पुत्राः कुसीदं दद्याः ॥ दायदा वा रिष्यदराः सहप्राहिणः प्रतिभूयो वा ॥ अस्तव्यातवेक्षकालं तु पुत्राः पीत्रा दायदा वा रिष्यं हरमाणा दद्याः ॥ (को० ३।११)

(२) बाम्यवृद्धिः सस्यनिष्पत्ताव्यावर्धिरं मूल्यकृता वर्धेत ॥ प्रक्षेपवृद्धिस्त्वयावर्धं संनिधानसम्मा बाधिको देया ॥ चिरप्रवासस्तम्भप्रविष्टो वा मूल्यद्विगुणं दद्यात् ॥ अकुत्वा वृद्धि साधयतो वर्धयतो वा मूल्यं वा वृद्धिमारोप्य भावयतो बन्धकतुर्गुणो दद्याः ॥ तुच्छचतुरधावनायामभूतचतुर्गुणः ॥ तस्य त्रिभागमादाता दद्यात् ॥ क्षवं प्रदाता ॥ (को० ३।११)

time, or who were suffering from disease, or who were detained in the houses of their teachers for learning, or who were either minors or too poor, was not to accumulate. A creditor refusing to receive the payment of his debt was to pay a fine of twelve panas. If the refusal was due to some reasonable cause, then the amount free from interest was to be kept in the safe custody of others. Debts neglected for ten years, except in the case of minors, aged persons, diseased persons, persons involved in calamities or persons who had fled the country, except in the case of disturbances in the kingdom, were not to be received back¹.

It may be pointed out in conclusion, that there was no complicated organisation of banking structure in ancient India. There appears to be no classification of the banking units into commercial banks, exchange banks, industrial banks, land mortgage banks, co-operative banks and the central bank of the country. But the spirit of banking, the need for capital, the productivity of capital as well as the inducement for the accumulation of capital in the form of interest and the utility of credit was fully recognised. The ancient bankers combined banking with trading and have survived in the form of Sahukars, Banias, Shroffs and Chettis who still continue to render useful service to industry, trade and agriculture and are the only means of banking assistance in many parts of the country. In recent years, an acute controversy has arisen over the question of socialisation of banking and financial institutions. The problem of socialising these institutions raises many other issues. There was no nationalisation of banking business in ancient India, but the necessary control on it was exercised by the state and the forms of money as well as systems of coinage were fully recognised.

(१) दीर्घसत्रस्याधिगुरुकुलोपहृष्टं बालमसारं वा वर्णमनुवर्षेत ॥ मुद्यमानमृणमप्रतिगृह्णतौ द्वादशपणो वण्डः ॥ कारणापदेशेन निवृत्तवृद्धिकमन्यत्र तिष्ठेत् ॥ दशवर्षोपेक्षितमृणमप्रतिग्राह्यमन्यत्र बालवृद्धस्याधितम्यसनिप्रोषितदेशत्यागराज्यविभ्रमेभ्यः ॥

CHAPTER XII

PUBLIC FINANCE AND TAXATION

श्रीर्वेराष्ट्रम् । श्रीर्वेराष्ट्रस्य भारः । श्रीर्वेराष्ट्रस्य मध्यम् ।

(शत० ब्रा० १३।२।३)

स्वाम्यमात्यो पुरं राष्ट्रं कोशबन्धो सुहृत्तया ।

सप्तप्रकृतयो ह्येताः सप्ताङ्गं राज्यमुच्यते ॥

सप्तानां प्रकृतीनां तु राज्यस्यासां यथाक्रमम् ।

पूर्वं पूर्वं गृहतरं जानीयाद्ध्यसनं महत् ॥

(मनु० १।२९४, २९५)

कोशश्च सततं रक्ष्यो यत्नमास्थाय राजभिः ।

कोशमूला हि राजानः कोशो वृद्धिकरो भवेत् ॥

राज्ञः कोशबलं मूलं कोशमूलं पुनर्बलम् ।

तन्मूलं सर्वधर्माणां धर्ममूलाः पुनः प्रजाः ॥

(म० शांतिपर्व, अ० ११९, १३०)

कोशपूर्वाः सर्वारम्भाः ॥ तस्मात्पूर्वं कोशमवेक्षेत ॥

(को० २।८)

Importance of Treasury

Sound finances are absolutely necessary for a stable and prosperous state. An extensive treasury is one of the strongest foundation of a strong government. The strength of a nation is reflected in its budget, because the extent of state activity and its efficiency are primarily dependent upon the length of its purse. With the meagre resources of a state, nation building departments cannot make much headway. The importance of the proposition—‘The Revenue of the State is the State’—was well realised by thinkers in ancient India. They included a prosperous treasury and ample reserve funds among the essential constituents of the state. Manu, Vyas and Kautilya have emphasised the importance of a sound treasury. According to Bhishma, any diminution in the treasury of a king was to be regarded as one of the most serious national calamities¹. Kautilya, the earliest of Indian economists, declared that the beginning of

(१) अशङ्कमानो वचनमनसूयुरिवं भूः ।

राज्ञः कोशक्षयादेव जायते बलसंक्षयः ॥ (महा० शांतिपर्व अ० १३०)

every undertaking was finance and showed remarkable ingenuity in preparing an almost exhaustive list of the form of economic activity which yielded substantial revenues to the exchequer¹.

Sources of Revenue

The earliest and most prevalent form of government interference with the economic life of individuals and business enterprises has been taxation. The right of the chief authority to collect taxes, the general policy which determined their collection and the purposes for which they were levied has always been a controversial issue. Adam Smith divided public revenues into two parts—(a) derived from the property of the sovereign and (b) derived from the property of the people. In ancient India, sovereign property consisted of crown lands, waste lands, forests, mines, natural tanks and reservoirs which yielded considerable income to the king. In almost all the times, the ancient Indian state claimed ownership in mines and their products. Mines always included salt deposits and sometimes stone quarries as well. Mines of precious metals happened to be important sources of income to the state. Both forests and mines including commerce in minerals and mineral products were state monopolies in Kautilya's system of administration. The superintendent of forests tried to secure revenues for the state and the state derived a very large income from mines both land and ocean. Very large areas were included in the royal or public domain which yielded a large margin of profit for the state. The King in Vedic times supported himself and his administrative staff out of the permanent proceeds of his own and of his subjects' lands, pastures and herds. The two Rig-Vedic hymns (Mandal 10 Sukta 173) seem to refer to such permanent sources of income for the king². During Kautilya's time, apart from the direct revenues of the state i.e. income from public domains and public industry, there were several derivative sources of revenue obtained from taxes, fees, fines, penalties and other miscellaneous sources of obtaining income for the state³.

(१) प्रचारसमृद्धिश्चरित्रानुग्रहश्चोरनिग्रहो युवतप्रतिषेधः सस्यसंपत्पण्यबाहुस्यमपसर्ग-
प्रमोक्षः परिहारक्षयो हिरण्योपायनमिति कोशवृद्धिः ॥ (की० २।८)

(२) इममिन्द्रो अवीधरश् ध्रुवं ध्रुवेण हविषा ।
तस्मै सोमो अग्निं ब्रह्मस्तस्मा उ ब्रह्मणस्पतिः ॥
ध्रुवं ध्रुवेण हविषाभि सोमं मशामसि ।
अथो त इन्द्रः केवलीविजो बलिहृतस्करत् ॥ (ऋ० १०।१७३।३,६)

(३) समाहर्ता दुर्गं राष्ट्रं क्षति सेतुं वनं व्रजं वणिक्पथं चावेक्षेत ॥ (की० २।६)

There are many references in the Mahabharat to show the diverse activities of the state in the realm of 'Varta' for the purpose of filling its treasury.

Single Vs. Multiple Taxation

Among the projects for social and tax reform, few have been more earnestly and enthusiastically supported than the single tax. A single tax denotes, as its name implies, the only tax, the exclusive tax, the tax on one class of things. The single tax has a long history behind it among Western thinkers. The Physiocrats like Quesnay and Turgot advocated a single tax on land. According to them, land was the only source of wealth and they advocated a single tax on this source of wealth. Henry George of San-Francisco advocated a single tax on unearned increment in land values. But single tax has been a dream of theorists only and has definitely been beyond the sphere of practical finance. It is interesting to note here that thinkers in ancient India never advocated a single tax, but a multiple system of taxation which has been adopted by every country in the world. The ancient Hindu theory of taxation is of immense importance in this respect. Apart from the question of amount and collection of taxes, the taxes were regarded in Hindu politics as the wages of the king for the services of administration¹. Land was, of course, the principal source of revenue, but the concept of the multiplicity of taxes is clear from the code of Manu. He recommended, alongwith the land dues from agricultural lands, several types of taxes on trade, animals, flower gardens, vegetables and other miscellaneous commodities. The same type of multiplicity of taxes is to be found in the Mahabharat as sugges-

(१) सर्वतो धर्मवद्भागो राज्ञो भवति रक्षतः ।
अधर्मादपि षड्भागो भवत्यस्य ह्यरक्षतः ॥
योऽरक्षन् बलिमादत्ते करं शूलं च पायिषः ।
प्रतिभागं च दण्डं च स सद्यो नरकं व्रजेत् ॥
अरक्षितारं राजानं बलिषड्भागहारिणम् ।
तमाहुः सर्वलोकस्य समग्रमलहारकम् ॥

(मनु० ८।३०४, ३०७, ३०८)

बलिषष्ठेन शूलेन दण्डेनाथापराधिनाम् ।
ज्ञास्त्रानीतेन लिप्तेषा वेतनेन धनागमम् ॥
वापयित्वा करं धर्म्यं राष्ट्रं नीत्या यथाविधि ।
तथैतं कल्पयेद् राजा योगक्षेममतन्त्रितः ॥

(म० शांतिपर्व, अ० ७१)

ted by Bhishma to Yudhishtira in the Shanti Parva¹. To secure the economic prosperity of the country and the state, there were taxes on agriculturists, mercantile class, artisan class, cattle breeders, dealers in gold and other merchandise, roots, fruits, flowers, medicinal herbs, honey, meat, grass and fire-wood, different kinds of toll taxes, taxes on owners of boats and carts, customs duties and a host of such other taxes. The long list of taxable commodities as given in the Smritis, the Mahabharat and specially Kautalya's Artha-shastra shows a developed state of administrative organisation, and also that the system of taxation included both direct and indirect taxes. Kautalya, while discussing the duties of the chamberlain and the business of collection of revenue by the collector-general, gives an idea that the chamberlain was to see to the construction of the treasure house, trading house, the store house for grains and the store house for forest produce. The collector-general was to attend to the collection of revenues from many sources. The sources of revenue pointed out by Kautalya include buildings, gardens, herds of cattle, roads of traffic, tolls, weights and measures, seals and passports, liquor, slaughter of animals, threads, oils, ghee, sugar, the state goldsmith and prostitutes as well as gambling sites. All these miscellaneous sources of taxation have been classified by Kautalya under different heads².

- (१) क्रयविक्रयमध्वानं भवतं च सपरिच्छदम् ।
 योगक्षेमं च सम्प्रेक्ष्य बणिजो वापयेत्करान् ॥
 यथा फलेन युज्येत राजा कर्ता च कर्मणाम् ।
 तथावेक्ष्य नृपो राष्ट्रे कल्पयेत्सततं करान् ॥
 पञ्चाशद्भाग आदेयो राज्ञा पशुहिरण्ययोः ।
 धान्यानामष्टमो भागः षष्ठो द्वावश एव वा ॥
 आदवीताथ षड्भागं द्रुमांसमधुमपिषाम् ।
 गन्धोषधिरसानां च पुष्पमूलफलस्य च ॥
 पत्रशकत्फलानां च समणो वै दलस्य च ।
 मूत्रमयानां च भाण्डानां सर्वस्याश्ममयस्य च ॥ (मनु० ७।१२७-१३२)
 विक्रयक्रयमध्वानं भवतं च सपरिच्छदम् ।
 योगक्षेमं च सम्प्रेक्ष्य बणिजां कारयेत् करान् ॥
 उत्पत्तिं दानवृत्तिं च शिल्पं सम्प्रेक्ष्य चासकृत् ।
 शिल्पं प्रति करानेवं शिल्पिनः प्रति कारयेत् ॥

(म० शान्तिपर्व, अ० ८७)

- (२) सन्निधाता कोशगृहं पण्यगृहं कोष्ठागारं कुप्यगृहमायुषागारं बन्धनागारं च कारयेत् ॥
 समाहर्ताचावेक्षत ॥ शूलकं वण्डः पीतध नागरिको लक्षणाध्यक्षो मूत्राध्यक्षः
 सुरा सूना सूत्रं तैलं घृतं भारं सीतलिकः पण्यसंस्थावेक्ष्य घृतं वास्तुकं काष्ठशिल्पी
 गणो देवताध्यक्षो द्वारबाहिरिकादेयं च दुर्गम् ॥ सीता भागो बलिः करो बणिक
 नदीपालास्तरो नावः पत्तनं विदीतं घर्तनी रज्जुश्चोररज्जुश्च राष्ट्रम् ॥

शेष अगले पृष्ठ पर

Land Tax

The system of the land tax had a very interesting development through the ages. Almost all over the world, the state arranged to secure for itself, by some form of a levy, a portion of the income derived by those who utilised the land for various purposes. Since very early times, kings were accustomed to take from the owners of the land in their dominions a certain portion of the produce grown by them. In India, from times immemorial, it has been customary for rulers to collect land revenue from those who cultivated land, although it is difficult to say when precisely this levy originated. There is a reference, in the Shanti Parva of the Mahabharat, to the payment of 1/10th of the produce of the land to Manu when he became the king of the people for the first time. Kautilya, while referring to the first kingship of Manu, has pointed out that people agreed to pay 1/6th of the produce of the land to the king in lieu of the protection granted by him¹. The share of the produce due to the ruler was assessed generally upon the land of a village as a whole and its payment was the joint responsibility of the whole village community. The land tax was generally paid in kind and the state used to have huge granaries at different centres where the corn collected in taxes was stored. Smritis lay down no uniform rate of taxation as regards land tax and the variation seems to be due partly to the quality of land and partly to the different needs of government in different times. Manu could not recommend 1/8th, 1/6th or 1/12th of the produce at the same time, unless he had different aspects of the problems in mind. There appears to be no permanent settlement of the land tax and the variations permitted by Manu-Smriti rendered its enhancement possible when required by the needs of state finances. Even to-day, the future pattern of this tax seems to be a complicated one, because in many matters of important details

सुवर्णरजतवज्रमणिमुक्ताप्रवालशङ्खलोहलवणभूमिप्रस्तररसधातवःकनिः ॥
पुष्पकल वाटवण्डकेदारमूलवापाः सेतुः ॥ पशुमृगव्रध्यहस्तिवनपरिग्रहोद्यमम् ॥
गोमहिषमजाविकं क्षरोष्ट्रमश्वश्वतराश्वव्रजः ॥ स्थलपथो वारिपथश्च वणिक्पथः ॥
इत्यायशरीरम् । (की० २।५,६)

(१) तमवृत्तं प्रजा मा भः कर्तुर्नेनो गमिष्यति ।
पशूनामधिपञ्चाशद्विरण्यस्य तथैव च ॥
वाग्यस्य दशमं भागं दास्यामः कोशवर्धनम् ।

(म० शांतिपर्व, अ० ६७)

मातस्यन्यायाभिभूताः प्रजा मनुं बंधस्वतं राजानं चक्रिरे ॥
वाग्यवद् भागं पथ्यदशभागं हिरण्यं वास्य भागधेयं प्रकल्पयामासुः ॥

(की० १।१३)

related to local conditions, there is bound to remain a justifiable diversity in the land revenue features of different states.

Principles of Taxation

So far as the modern canons of taxation are concerned, Adam Smith's contribution in this field is still regarded as classic. His statement of the canons of taxation has hardly been surpassed in clarity and simplicity. His canons constitute the foundation of all discussions on the principles of taxation. Briefly stated, these canons suggest that taxation should conform to the standards of justice, certainty, convenience and economy. The system of taxation in a country affects the entire economic life and is regarded as a powerful instrument of social justice. It is employed by modern governments to bridge, as far as possible, the gulf between the rich and the poor. The most fundamental principle of public finance, these days, is said to be the Principle of Maximum Social Advantage and the disposal of the economic resources of the country by public authorities in such a way that it leads to maximum social welfare. The purpose of all taxation, in ancient India, was the welfare of the people. Generally all the forms of ordinary revenue included a great solicitude not only for the treasury but also for the tax payer. Manu, the great law giver, suggested that the king was to act like Sun and Indra in the collection and distribution of resources from and to the people. He meant to point out that just as Sun's rays collected drops of water gradually during eight months of the year, but all that was collected, was distributed by rain-god Indra during the four months of rainy season. Similarly, a king was gradually to collect taxes from the people and spend the same for their welfare as and when required¹. Certain sound principles of taxation were always kept in mind and the king was not to forget that nothing exposed him to greater hatred of the people than oppressive taxation. It is pointed out by Bhishma in the Mahabharat that harrasment of the subjects by taxes, not based on certain principles and motivated by Artha only, was likely to do a great harm to the king himself. The concept of taxable capacity was clearly kept in mind and it was emphasised that people should be taxed in a way that they remain capable enough to bear future

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- (१) बाधिकाश्चतुरो मासान् ययेन्द्रोऽभिप्रवर्षति ।
 तथाभिवर्षेत्स्वं राष्ट्रं कामैरिन्द्रव्रतं चरन् ॥
 अष्टौ मासान् यथादित्यस्तोयं हरति रश्मिभिः ।
 तथा हरेत्करं राष्ट्राभित्यमर्कव्रतं हि तत् ।

(मनु० ९।३०४, ३०५)

burdens¹. No one could be taxed too often and if extra revenue was needed, additional taxation could be enforced by the consent of the people.

One of the chief characteristics of a good tax system, these days, is said to be its clarity and convenience i.e. its effects should be calculable with a reasonable precision and also that it should be felt as little as possible. The great principle emphasised by Vidura and Bhishma, in the Prajagar and Shanti Parva of the Mahabharat, is that taxation should be of a type that it is the least felt by the people. The ruler was to act like a bee which collects honey without causing pain to the plant. The level of taxation was to be raised slowly and gradually when the realm's prosperity was increasing and the process was to be mild enough so that the people might not become restive². The taxes to be levied were to be in proper place, proper time and proper form

- (१) यदा राजा समर्थोऽपि कोशार्थी स्यान्महामते ।
 कथं प्रवर्तेत तदा तन्मे ब्रूहि पितामह ॥
 मधुदोहं दुहेद् राष्ट्रं भ्रमरा इव पादपम् ।
 वत्सोपेक्षी दुहेत्तुल्यं स्तनांश्च न विकुट्टयेत् ॥
 जलोकावत् पिबेद् राष्ट्रं मृदुनैव नराधिपः ।
 व्याघ्रोव च हरेत् पुत्रान् संवशन्न च पीडयेत् ॥
 उच्चावचकरा बाध्या महाराज्ञा यश्चिष्ठिर ॥
 यथा यथा न सीधेरस्तथा कुर्यान्महीपतिः ।
 फलं कर्म च सम्प्रेक्ष्य ततः सर्वं प्रकल्पयेत् ॥
 नोच्छिन्नादात्मनो मूलं परेषां चापि तृणया ॥
 ईहाद्वाराणि संरुध्य राजा सम्प्रीतवर्शनः ।
 प्रद्विषति परित्यातं राजानमतिस्त्रादिनम् ॥
 प्रद्विष्टस्य कुतः श्रेयो नाप्रियो लभते फलम् ।
 वत्सोपम्येन दोग्धयं राष्ट्रमक्षीणबुद्धिना ॥
 भूतो वत्सो जातबलः पीडां सहति भारत ।
 न कर्म कुरुते वत्सो भृशं दुग्धो यश्चिष्ठिर ॥

(म० शांतिपर्व, अ० ८७, ८८)

- (२) यथा मधु समादत्ते रक्षन् पुष्पाणि वटपदः ।
 तद्वदयान् मनूयैभ्यः आदद्यादविहिंसया ॥
 पुष्पं पुष्पं विचिन्वीत मूलच्छेदं न कारयेत् ।
 मालाकार इवारामे न यथाङ्गारकारकः ॥

(म० उद्योगपर्वणि-प्रजामरवर्ग, अ० ३४)

यथा शल्यकवानाक्षुः पदं धनुयते सदा ।
 अतीक्ष्णनाभ्युपायेन तथा राष्ट्रं समापिबेत् ॥
 अल्पेनाल्पेन देयेन वर्षमानं प्रदापयेत् ।
 ततो भूयस्ततो भूयः क्रमवृद्धिं समाचरेत् ॥
 शेषे अगले पृष्ठे पर

and were not be realised by a painful method¹. One of the immutable principles of public finance in raising revenue was that no demand was made on those who had not enough for their own subsistence. Sound principles for partial or total remission of normal taxation have been recommended by Shukracharya and Kautilya when the situation justified such concessions. Exemptions from taxation have been recommended by Dharma Smritas of Apastambha. Smritis of Manu and Vashistha also recommended exemptions from taxation for learned Brahmans, deaf, dumb, blind, orphans, widows, unmarried girls, ascetics, students, infants and old men of seventy. Smritis seem to be unanimous on the exemptions of Brahmans from taxation, but the Mahabharat gives a clear classification of the Brahmans and suggests that those Brahmans who are in government appointments or following lucrative professions may be taxed. Exemption from taxation for the Brahmans was, therefore, not the general rule but an exception for those who were learned, poor and received no State patronage. Kautilya, while suggesting measures for the replenishment of the treasury in Chapter II Book V, has pointed out that the king was not to demand any share of the agricultural produce from those subjects who lived in tracts of middle or low quality nor of people who were of great help in the construction of fortifications, gardens, buildings, roads for traffic, colonisation of waste lands, exploitation of mines and formation of forest preserves for timber and elephants, nor of the people who lived on the border of the kingdom or who had not enough subsistence².

वसयन्निव दम्यानि शशवद् भारं विवर्धयेत् ।
मृदुपूर्वं प्रयत्नेन पाशानभ्यवहारयेत् ॥
उपायान् प्रवर्धयेत्तान् न मे माया विवक्षिता ।
अनुपायेन वसयन् प्रकोपयति वाजिनः ॥

(म० शान्तिपर्व, अ० ८८)

(१) न चास्थाने न चाकाले करांस्तेभ्यो निपातयेत् ।
आनुपूर्व्येण सान्त्वेन यथाकालं यथाविधि ॥

(म० शान्तिपर्व, अ० ८८)

(२) अग्नौ जडः पीठसर्पा सप्तत्या स्थविरश्च यः ।
श्रोत्रियेषूपकुर्वश्च न दाप्याः केनचित्करम् ॥

(मनु० ८।३९४)

निरुद्धस्तरोमोव्योऽकरः श्रोत्रियो राजपुमाननाथप्रवर्जितबालबृद्धतदनप्रदातारः
प्रागणामिकाः कुमार्यो मृतपत्न्यश्च ॥ बाहुभ्यामुत्तरञ्छतगुणं दद्यात् ॥ नदीकक्ष
वनबाहुसंलोपभोगा निष्कराः स्युस्तदुपजीविनो वा दद्युः ॥

(वसिष्ठ १९।१५, १६, १७)

सर्वे अगले पृष्ठ पर

Emergency Finance

The principles and methods of taxation discussed so far generally related to ordinary and normal times of peace, but there arose extra-ordinary occasions and emergencies when those concerned with the finances of the state had to resort to special methods to procure extra-ordinary finance and replenish the treasury to meet such emergencies. Some of the methods known to modern governments for raising funds in times of emergency have been—(a) utilisation of hoarded wealth (b) imposition of new taxes and raising of the rates of old taxes (c) floatation of both temporary and permanent loans and (d) the issue of inconvertible paper money. Problems of ordinary and extra-ordinary finance were solved in their own way by governments in ancient India. Manu suggested a $1/4$ th share of the agricultural produce in times of emergencies¹. In the Shanti-Parva of the Mahabharat, Bhishma suggested to Yudhishtira that the king could raise additional finance in abnormal times both inside and outside the country. But he had to send out special messengers or approach the people himself to explain clearly the gravity of the situation and to win over their confidence for raising extra-ordinary finance. The people had to be assured that the additional burden placed on them was for their own benefit and that the funds borrowed or realised in the form of additional taxes were to be returned to them when the purpose was served². The revenues received from the recognised ordinary

विद्यालक्षणसम्पन्नाः सर्वत्र समर्थाश्चिनः ।
एते ब्रह्मसमा राजन् ब्राह्मणाः परिकीर्तिताः ॥
जन्मकर्मविहीना ये कवर्था ब्रह्मबन्धवः ।
एते क्षत्रसमा राजन् ब्राह्मणानां भवन्त्युत ॥
अश्वारोहा गजारोहा रथिनोऽथ पदातयः ।
एते वैश्यसमा राजन् ब्राह्मणानां भवन्त्युत ॥
अश्वोन्निधाः सर्वे एव सर्वे क्षानाहिताग्नेयः ।
तान् सर्वान् धामिको राजा बलिं विष्टिं च कारयेत् ॥

(म० शान्तिपर्व, अ० ७६)

यथासारं मध्यमवरं वा दुर्गतेषु कर्मबन्धिवपयज्ञान्यनिवेशकानिब्रह्महस्तिवन कर्मोपकाणि
प्रत्यस्तमल्पप्राणं वा न याचेत् ॥ अरण्यजातं श्रोत्रियस्त्वं च परिहरेत् ॥

(को० २१५)

- (१) चतुर्वर्णाद्वानोऽपि क्षत्रियो भागमापदि ।
प्रजा रक्षन् परं शक्यतां किल्बिषात् प्रतिमुच्यते ॥ (मनु० १०।११८)
- (२) मित्रं प्रहृषयमाणस्य बह्वमित्रस्य का गतिः ।
राज्ञः संक्षीणकोशस्य बलहीनस्य भारत ॥

शेष अगले पृष्ठ पर

sources were not always sufficient for state expenditure in the days of Kautilya, because of the defence of the realm against Selukes's invasion. The state was driven to various financial shifts to meet such emergencies. Special methods were adopted and special appeals were made for the people's benevolences to replenish the state treasury. Kautilya proposed various extraordinary and irregular means of raising revenues, but it did not mean that such measures lay within the divine right of kings or were justified by any circumstances save the Common Weal and grave dangers threatening the existence of the state. Kautilya, in Chapter II Book V of his Arthashastra, suggested that the king who found himself in great financial trouble and needed money could collect revenue by demand. This demand could be $1/3$ rd or $1/4$ th of the grain according to the capacity of the cultivators. The king could also demand $1/6$ th of forest produce and of such commodities as cotton, wax, fabrics and other such miscellaneous things from cultivators. The cultivators were

उपायं धर्मबहुलं यात्रार्थं भूणु भारत ।
नाहमेतादृशं धर्मं बहुष्वे धर्मकारणात् ॥
नाग्यानपीडयित्वेह कोशः शक्यः कुतो बलम् ।
तदर्थं पीडयित्वा च दोषं प्राप्तुं न सोऽर्हति ॥
अकार्यमपि यज्ञार्थं क्रियते यज्ञकर्मसु ।
एतस्मात् कारणाद् राजा न दोषं प्राप्तुमर्हति ॥
अर्थार्थमन्यद् भवति विपरीतमथापरम् ।
अनर्थार्थमथाप्यन्यत् तत् सर्वं ह्यर्थकारणम् ।
एवं बुद्ध्या सम्प्रपश्येन्मेषाधी कार्यनिश्चयम् ॥
स्वराष्ट्रात् परराष्ट्राच्च कोशं संजनयेन्नृपः ।
कोशाद्धि धर्मः कीर्त्तेय राज्यमूलं च वर्धते ॥

(म० शान्तिपर्व, अ० १३०, १३३)

प्रागेव तु धनादानमनुभाष्य ततः पुनः ।
संनिपत्य स्वविषये भयं राष्ट्रे प्रदर्शयत् ॥
इयमापत्समुत्पन्ना परचक्रभयं महत् ।
अपि चास्ताय कल्पन्ते जेणोरिव फलागमाः ॥
अरयो मे समुत्थाय बहुभिर्हंस्युभिः सह ।
इदमात्मवधार्थं राष्ट्रमिच्छन्ति बाधितुम् ॥
अस्यामापदि घोरायां सम्प्राप्ते दारुणे भये ।
परित्राणाय भवतः प्रार्थयिष्ये धनानि वः ॥
प्रतिदास्ये च भवतां सर्वं चाहं भयक्षये ।
नारयः प्रतिदास्यन्ति यद्वरेयुर्बलादितः ॥
इति वाचा मधुरया श्लक्ष्णया सोपचारया ।
स्वरश्मीनभ्यवसृजेद् योगमाधाय कालवित् ॥

(म० शान्तिपर्व, अ० ८७)

made to pay one-half of all ivory and skins of animals in times of emergency¹.

Merchants, dealing in gold, silver, diamonds, precious stones, pearls, coral, horses were to pay 50 karas. Those who traded in cotton threads, clothes, copper, brass, bronze and liquor were to pay 40 karas. Those who traded in grains, liquids were to pay 30 karas. Other artisans of fine workmanship and that of inferior workmanship were to pay 20 and 10 karas respectively. The entire property of goldsmiths was to be taken possession of and no offence of theirs was to be forgiven, because they carried on fraudulent trade while pretending to be honest and innocent². There were certain demands made on those keeping cows, buffaloes, mules, asses and who were to give 1/10th of their live-stock. Persons rearing hens and pigs were to surrender to the government half of their stock of animals and those who reared inferior animals were to give 1/6th of their stock. Wealthy persons were to be requested to give as much gold as they could, and those who offered their wealth of their own accord were to be honoured with a rank in the court and umbrella or some ornament in return for their wealth. The superintendent of religious institutions could collect in one place the various kinds of property of gods, of fortified cities and country parts and carry away the same to the king's treasury. Several methods of spies have been suggested by Kautilya for collecting money from the people and there were measures taken against the seditious and the wicked³. In con-

- (१) कोशमकोशः प्रत्युत्पन्नार्थकृच्छ्रः संग्रहणीयात् ॥ जनपदं महान्तमल्पप्रमाणं वा देवमातृकं प्रभूतधाम्यं धान्यस्यांशं तृतीयं चतुर्थं वा याचेत् ॥ चतुर्थमंशं धान्यानां षष्ठं धान्यानां तुललाक्षाक्षीमवत्ककार्पासरोमकोशेयकोषधगन्धपुष्पफलशक पण्यानां काष्ठवेणुमांसवल्गुराणां च संग्रहणीयः ॥ दन्ताजिनस्याधम् ॥ तद्वनिसुध्वं विक्रीणनस्य पूर्वः साहसदण्डः ॥ इति कर्षकेषु प्रणयः ॥ (को० ५।२)
- (२) सुवर्णरजतवज्रमणिमुक्ताप्रबालादवहस्तिपण्याः पञ्चाशत्कराः ॥ सूत्रवस्त्रताम्रवृत्तकंसगन्धर्भेषज्यशोषपण्याश्चत्वारिंशत्कराः ॥ धान्यरसलोहपण्याः शकटव्यवहारिणश्च त्रिंशत्कराः ॥ काच व्यवहारिणो महाकारवश्च विंशतिकराः ॥ क्षुद्रकारवो वर्षकपोषकाश्च दशकराः ॥ काष्ठवेणुपाषाणमूढभाण्डपद्माश्चरितपण्याः पञ्चकराः ॥ हिरण्यकरकर्मण्यानाहारयेयुः ॥ न चैषां कंचिदपराधं परिहरेयुः ॥ ते ह्यपरगृहीतमभिनीय विक्रीणीरन् ॥ इति व्यवहारिषु प्रणयः ॥ (को० ५।२)
- (३) कुक्कुटसूकरमर्षं वद्यात् ॥ क्षुद्रपशवः षड्भागम् ॥ गोमहिषाद्वारखरोष्ठश्च दशभागम् ॥ इति योनियोषकेषु प्रणयः ॥ सारतो वा हिरण्यमाह्वान्याचेत् ॥ यथोपकारं वा स्ववशा वा यदुपहरेयुः स्थानच्छत्रवेष्टविभूषाश्चैषां हिरण्येन प्रयच्छेत् ॥ देवताध्यक्षो दुर्गराष्ट्रं देवतानां यथास्वमेकस्थं कोशं कुर्यात् ॥ तथैव चापहरेत् ॥ साध्वीव्यञ्जनाभिः स्त्रीभिर्दृष्ट्यानुस्मादित्वा तासामेव वेदमस्वभिगृह्य सर्वस्वान्याहरेयुः ॥ (को० ५।२)

nection with the financial troubles of the king and replenishment of the treasury, Kautilya has finally suggested that just as fruits are gathered from a garden as often as they become ripe, so revenue should be collected as often as it becomes ripe. Collection of revenue or of fruits, when unripe, was not to be carried on lest their source may be injured causing immense trouble¹. The government of the day in our country may take a lesson from these suggestions of Kautilya for emergency finance.

Public Expenditure And Financial Administration

Public expenditure, these days, has reached astronomical figures in different countries of the world and has received greater attention on the part of statesmen and economists. A scientific study of public expenditure has resulted in its various classification. It is being gradually realised that the aim of Maximum Social Benefit can be achieved by a judicious and scientific system of public expenditure by a welfare state. Wars and disorders can seldom be ruled out from the history of the world. Defence and maintenance of law and order was never neglected in ancient India. This included an adequate armed force in all its branches of army and navy with proper equipment both for offence and defence. But the nation-building departments were not starved at the cost of military expenditure. Several hymns of the Vedas suggest for an efficient military organisation as well as economic welfare of the people. The military prowess of the Rigvedic Aryans is reflected in the hymns of Rig Veda². The great Epic of the Mahabharat is full of details of the four-fold division of the military organisation. Sage Narad, in the Sabha Parva of the Mahabharat, questioned king Yudhishtra on this aspect of his administration and sufficient

(१) पक्षं पक्षविचारामोत्फलं राज्याद्वानुयात् ।

आमच्छेदभयादामं वर्जयेत्कोपकारकम् ॥ (कौ० ५।२)

(२) प्र सेनानीः क्षूरो अग्ने रचानीं गच्छेति हृष्यते अस्य सेना ।

भद्राङ्कुर्वन्निग्रहवाम्सस्त्रिभ्य आ सोमो वस्त्रा रभसानि वस्ते ॥

अजीतयेऽहृतये पवस्व स्वस्तये सर्वतातये' बृहते ।

तदुशस्ति विदध इमे सखायस्तवहं वदिम पवमान सोम ॥

(ऋ० १।१६।१,४)

मग्ना कुण्ड्वं धिय आ तनुष्वं नावमरित्रपरणीं कुण्ड्वम् ।

इङ्कुण्ड्वमायुधारं कुण्ड्वं प्राञ्चं यज्ञं प्रणयता सखायः ॥

(ऋ० १०।१०।१२)

expenditure for a contented army¹. Shukracharya has given an idea of the percentages of expenditure for different purposes which include expenditure both for protective and welfare activities². Maintenance of national highways and their equipment with bridges, rest houses and trees, irrigation works, temples, institutions of public welfare, protective establishments for the peaceful citizen, merchants and travellers, granaries and goshalas received fair share of attention from public expenditure. The cost of national defence and of civil administration including salaries of ministers and expenses of all departments of governments were fairly met with, out of the revenues of the state. Kautilya did not neglect the nation-building departments like health and sanitation and laid down heavy penalty against a king who did not spend properly³.

A study of the modern Financial Administration involves a study of the preparation of the Annual Financial Statements of the Governments containing the receipts and payments of money. This Statement, known as the Annual Budget, has got to be presented and approved by the legislature. Proper accounts have to be maintained according to set rules and a regular pattern. A proper check is to be kept so that the money

- (१) कच्चिद्वष्टाङ्गं संयुक्ता चतुर्विधबला जम् ।
 बलमूर्त्युः सुनीता ते द्विषतां प्रतिबन्धिनी ॥
 कच्चिद् दुर्गाणि सर्वाणि धनधान्यायुषोदकैः ।
 यन्त्रंश्च परिपूर्णानि तथा शिल्पिधनधरैः ॥
 कच्चिद् बलस्य भक्तं च धेतनं च यथोचितम् ।
 सम्प्राप्तकाले दातव्यं ददासि न विकर्षसि ॥

(सभापर्व, अ० ५)

- (२) प्रजानां बालनं कार्यं नोति पूर्ववत् नृपेण हि ।
 मार्गसंरक्षणं कुर्याद्भूपः पांथसुखाय च ॥
 पांथप्रपौडकाये हृतव्यास्ते प्रयत्नतः ।
 त्रिभिरंशं बलं धार्यं दानमर्चाशकेन च ॥
 अर्चाशेन प्रकृतयो ह्यर्चाशेनाधिकारिणः ।
 अर्चाशेनात्मभोगश्च कोशाशेन सरस्यते ॥
 आयस्यैवं च द्विविधभागैर्व्ययं कुर्यात्सुवत्सरे ।
 सामंता विषयमर्थं न्यूनस्य कदाचन ॥

(शु० नी० १।३१३-३१६)

- (३) कच्चिदर्थानि विनिश्चित्य लघुमूलान् महोदयान् ।
 क्षिप्रमारभसे कर्तुं न विद्यमसि तादृशान् ॥
 कच्चित् स्वपरराष्ट्रेषु बहुबोधिभिरुतास्तव ।
 अर्थान् समक्षितिष्ठन्ति रक्षन्ति च परस्परम् ॥
 कच्चित् कोदश्च कोष्ठं च बाह्यं द्वारमायुधम् ।
 आयश्च कृतकल्याणस्तव भर्तारनुष्ठितः ॥

(अ० सभापर्व, अ० ५)

obtained from the people is correctly accounted for and spent economically and regularly for the welfare of the people. The Annual Budget, at its various stages of preparation, approval and execution, is regulated and controlled by the legislature, the Executive Government, the Finance Department and the Audit Department. Due discharge of the responsibilities of a modern government means huge expenditure. Expert financial opinion has been veering round to the view that the best budget is that which shows a small deficit rather than one which shows a big surplus. The ancient Indian State was also interested in a number of *productive enterprises but the Indian financiers* of old did not ordinarily budget for a deficit if not for a surplus. The Mahabharat throws some light on this¹. Problems of a Balanced Budget or a Surplus Budget were considered more important in ancient days and there was a positive duty imposed on ancient financiers to make savings so as to build up an ample treasury. It appears that yearly budgeting was not considered necessary but the general surplus of income over expenditure was surely kept in view. Kautalya has given very detailed and minute rules about keeping, preparation, submission and scrutiny of accounts. The Revenue Department which was under a cabinet minister had a large number of superintendents working under it.

Receipts have been classified by Kautalya into (a) current (b) last balance and (c) accidental. Expenditure analysed by Kautalya is of two kinds—daily expenditure and profitable expenditure and it has been suggested that a wise collector-general was to conduct the work of revenue collection by increasing the income and decreasing the expenditure. The Superintendent of Accounts was to have the accountant's office constructed with the door facing either the North or the East, with seats (for clerks) kept apart and with shelves of account books well arranged. From these books, the Superintendent was to furnish the accounts as to the forms of work in hand, of receipts, of expenditure, of net balance and of tasks to be undertaken in each of the several departments. To supervise the works of high, middling and low description, superintendents with correspon-

- (१) कच्चिदायस्य चार्धेन चतुर्भागेन वा पुनः ।
 पादभागैस्त्रिभिर्वापि ध्ययः संशुद्धयते तव ॥
 कच्चिच्चायव्यये युक्ताः सर्वे गणकलेखकाः ।
 अनृत्तिष्ठन्ति पूर्वज्ञे नित्यमायं ध्ययं तव ॥ (म० सभाषर्षं, अ० ५)
 तत आयव्ययो पूजो तस्मै राजा न्यवेदयत् ।
 अतो विद्वन्पादस्व यवत्र दसु मन्यते ॥
 तत आयव्ययो ब्रह्मवा समो सममतिद्विजः ।
 सर्वथा प्राणिनां योढाम्पादानादस्यत ॥ (म० वनपर्व, अ० १८)

ding qualifications were to be employed and the king was to suffer in the end if he curtailed the amount of expenditure on profitable works. Accounts were to be submitted at the close of the month of Asadha. When the accountants of different districts presented themselves with sealed books, commodities and net revenue, they were to be kept apart in one place, so that they could not carry on conversation with each other. Having heard from them the totals of receipts, expenditure, and net revenue, the net revenue was to be received. By whatever amount the superintendent of a department augmented the net total of its revenue, either by increasing any one of the items of its receipts or by decreasing any one of the items of expenditure, he was to be rewarded eight times that amount. But when it was reversed, the award was also reversed i.e. he was fined eight times the decrease. Those accountants who did not present themselves in time or who did not produce their account books along with the net revenue were to be fined ten times the amount due from them. All the ministers (Mahamatras) were together to narrate the whole of the actual accounts pertaining to each department. When an officer did not facilitate or rendered the receipts and expenditure otherwise than prescribed, he was to be punished. The king was to forgive an offence only when it was trifling, have satisfaction even when the revenue was scanty and honour with reward such of his superintendents who were of immense benefit to him.¹

It is, therefore, clear that Kautilya advocated a system of financial administration through a judicious policy of placing a premium on efficiency honesty and punctuality while a discount on inefficiency, and irregularity. He suggested that the superintendents of all the departments were to carry on their respective works in company with accountants, writers, coin examiners, treasurers and military officers. Those who attended upon military officers and were noted for their honesty and good con-

- (१) अक्षपटलमध्यक्षः प्राङ्मुखमुदङ्मुखश्च विभक्तोपस्थानं निबन्धपुस्तकस्थानं कारयेत् ॥ गणनिबन्धान्यावाहीमागच्छयुः ॥ आगतानां समुद्रपुस्तभाण्डनीबीकानामेकत्रा संभाषावरोधं कारयेत् ॥ आयध्यनीबीनामप्राणिं भ्रूया नीबीमबहारयेत् ॥ यच्चप्रादायस्यान्तरवर्णे नीध्या वर्षेत्, वयस्य वा यस्परिहापयेत्सदृष्टगुणमध्यक्षं दापयेत् ॥ विपर्यये तमेव प्रति स्यात् ॥ यथाकालमागतानामपुस्तकीधिकानां वा देयदशवन्धो दण्डः ॥ प्रचारसमं महामात्राः समदाः आचयेयुरविषममात्राः ॥ पृथग्भतो मिथ्यावाही चैवामुत्तमवण्डं दद्यात् ॥ राजार्थेऽर्थकारणिकस्याप्रतिबन्धतः प्रतिबधेयतो वाक्तां निबन्धादायध्यमन्यथा वा विकल्पयतः पूर्वं साहसवण्डः ॥

अपराधं सहेतात्वं तुल्येऽवल्पेऽपि क्षोभये ।

महोपकारं चाध्यक्षं प्रग्रहेणाभिपूजयेत् ॥

(कौ० २।७)

duct were to be spies to watch the conduct of accountants and other clerks. He has pointed out forty ways of embezzlement of funds and has emphasised that just as fish moving under water cannot possibly be found out either as drinking or not drinking water, so government servants employed in the government work cannot be found out while taking money for themselves. It is possible to mark the movements of birds flying high up in the sky, but not so is it possible to ascertain the movement of government servants of hidden purpose. He believed that men are naturally fickle minded and, like horses at work, exhibit constant change in their temper. Hence the agency and tools which they make use of, the place and time of work they are engaged in, as well as the precise form of the work, the outlay and the results were always to be ascertained. He has suggested that government servants should not only be confiscated of their ill-earned hoards, but also be transferred from one work to another so that they cannot either misappropriate government money or if they do are made to pay back to the treasury the amount misappropriated. Those who increased the king's revenue instead of eating it up and were loyally devoted to him were to be made permanent in service¹.

India has gone through so many changes of fortune since the days of Kautilya and is again an independent country. The welfare State has become an accepted objective involving increased expenditure on social services. In a developing country, the fiscal system is all important, because it provides the most flexible instrument of running the policy of administration. There is no part of the economy which cannot be effected by a sound fiscal policy and India has a fairly long-established tradition in this respect. It is undoubtedly true that the tax system should be geared to assist development and tailored closely to the parti-

- (१) तस्मादस्याध्यक्षाः संव्यायक लेखकरूपदशकं नीची ग्राहकोत्तराध्यक्ष सखाः कर्माणि कुर्युः ॥ प्रतिबन्धः प्रयोगो व्यवहारोऽवस्तारः परिहापणमपभोगः परिषर्तनमपहारश्चेति कोशक्षयः ॥ तेषां हूरणोपायाश्चत्वारिंशत् ॥ मत्स्या ययान्तः सलिले चरन्ती, ज्ञातुं न शक्याः सलिलं पिबन्त युक्तास्तथा कार्यविधी नियुक्ताः, ज्ञातुं न शक्या अनवावधानाः ॥ अपि शक्या गतिर्ज्ञातुं पततां खे पतत्रिणाम् । न तु प्रच्छन्नभावानां युक्तानां चरतां गतिः ॥ क्षिप्तानित्यत्वात्मनोऽद्याणाम् ॥ अश्वसत्त्वमिषो हि मनुष्या नियुक्ताः कर्मसु विकुर्वते ॥ तस्मात्कर्तारं कारणं देशं कालं कार्यं प्रक्षेपमदयं क्षेपु विद्यात् ॥

आस्त्रावयेच्छोपक्षिताग्निपर्यस्येच्छ कर्मसु ।

यथा न भक्षयन्मर्षं भक्षितं निर्वमगति वा ॥

न भक्षयन्ति ये स्वर्षान्ध्यायतो बर्षयन्ति च ।

नित्याधिकाराः कार्यास्ते राज्ञः प्रियहिंसे रताः ॥

(की० २।८, ९)

cular needs of the economy. The role of the taxes, in a developing country, is even more important. Income-tax in our country has developed greatly and stands out to-day as one of the most important single source of revenue in the country. The salt tax has been abolished, but the sales tax has become a principal source of revenue for state governments. Level of taxation in different forms has increased to such an extent that influential sections of public opinion complain of the heavy burden of taxation and its deterrent effects on capital formation and economic development in the private sector. There is also a feeling that the burden of taxation is uneven in its incidence on different classes of income and on different income groups. A review of the broad trends of public expenditure in India during the second plan is of value for a general appraisal of the country's financial position at present. The extent to which taxation may be felt as a burden partly depends on the objects on which tax revenues are spent and the manner in which the benefits of expenditure are distributed. A precise view of the benefits accruing from public expenditure to different classes in the community has to be kept in view, because the character of public expenditure has also some bearing on the appropriate methods of its financing.

An integrated picture of the country's finances, of public expenditure as well as public revenues, needs attention on the part of planners and the finance ministry has to set standards of austerity, efficiency, regularity and economy. If the Governments in London, Washington, Moscow and Peking can be the subject of constant criticism and if there is a constant drive in these countries for economy, there is a greater need in this country for an effort to see that every pie of public expenditure is justified. An earnest effort has to be made to eliminate waste of all kinds for the task of nation-building. There appears to be a sub-conscious current of wastage in our planning expenditure and that is why the need of emphasising an anti-waste campaign and getting the full value for the money spent. There is no doubt a paramount need to increase public outlay on social welfare and imperative need to diminish inequalities in income and wealth distribution, but in a sound system of public administration and public finance there have to be no prejudices for any section of the population. Under a policy of non-alignment with any of the power blocks in foreign affairs and in an economy where public enterprise, mixed enterprise and private enterprise have to play an important role in national reconstruction, both rich and poor deserve an equal measure of fair treatment. Bhishma, the aged and wise counsellor, suggested to Yudhishtra that the rich in the country should be respected by the king as they formed a

vital part of state, but he was emphatic to point out, at the same time, that there were to be no beggars and robbers in the kingdom as they brought nothing but defamation to the administration of the kingdom. Bhishma believed that the king was to be friendly and sympathetic towards all sections of the population and thereby he was to attain a stable treasury and a strong realm¹.

- (१) धनिनः पूजयेन्मित्रं पानाच्छादनभोजनः ।
 वस्तव्याश्चानुगृह्णोर्ध्वं प्रजाः सह मयेति वं ॥
 अङ्ग मेतन्महद् राज्ये धनिनो नाम भारत ।
 ककुब् सर्वभूतानां धनस्थो नात्र संशयः ॥
 मा ते राष्ट्रे याचनका भूवन्मा खापि वस्यथः ।
 एषां दातार एव ते नन्ते भूतस्य भावकाः ॥
 ये भूतान्यनुगृह्णन्ति वर्धयन्ति च ये प्रजाः ।
 ते ते राष्ट्रेषु वर्तन्तां मा भूतानामभावकाः ॥
 प्राज्ञः शूरो धनस्थश्च स्वामी धार्मिक एव च ।
 तपस्वी सत्यवादी च बुद्धिमान्श्चापि रक्षति ॥
 तस्मान् सर्वेषु भूतेषु प्रीतिमान्भव पाथिव ।
 सत्यमार्जवमक्रोधमानुशस्यं च पालय ॥
 एवं वण्डं च कीशं च मित्रं भूमिं च लप्स्यसि ।
 सत्यार्जवपरो राजन् मित्रकोशबलाम्बितः ॥

CHAPTER XIII

ECONOMY OF WAR AND PEACE

साम्ना दानेन भेदेन समस्तरथवा पृथक् ।
विजेतुं प्रयतेतारीन् न युद्धेन कदाचन ॥

अनिस्थो विजये यस्माद्बुध्यते युध्यमानयोः ।
पराजयश्च संग्रामे तस्माद्युद्धं विवर्जयेत् ॥ (मनु० ७।१९८, १९९)

वर्जनीयं सदा युद्धं राज्यकामेन धीमता ।
उपायैस्त्रिभिरादानमर्थस्याह बृहस्पतिः ॥

साम्नेन तु प्रदानेन भेदेन च नराधिप ।
यवर्थं शक्नुयात् प्राप्तुं तेन तुल्येत पण्डितः ॥

(महा० शांतिपर्व, अ० ६९)

सर्वं राज्ञा योद्धव्यं सर्वलोकाद् युधिष्ठिर ।
तस्माद्धेतोर्हि युञ्जीत मनुष्यानेव मानवः ॥

(महा० शांतिपर्व, अ० ८९)

वेदेव्यनुश्रूयते समाप्तवस्त्रिणानां यज्ञानामवभृतेषु ॥

सा ते गतिर्या शूराणाम् इति ॥ (कौ० १०।३)

Our Love Of Peace

Blessed are the peace makers who studiously promote love and peace all round. Peace is vital for national and international progress of the world. All the great thinkers of India, through the ages, have tried with all their might to promote peace and avoid life long bitterness both through words and deeds. They realised that a nation's visions of peace could not be attained through greed, hatred, jealousy and a spirit of competitive outlook. The munitions for peace were supposed to be justice, honesty, mutual understanding and respect for the rights of others. Ancient Indians seldom went out expeditioning and subjugating people for purposes of exploitation. It were undoubtedly scholars and thinkers of India who went out in quest of truth, to dissipate light and to win over nations thereby. Their sovereignty imposed itself upon the people without having to be imposed, because their mode of conquest was the conquest of heart and mind and not of body. The pioneers in the field of greater India always tried to establish an empire of righteousness. But the Vedas as well as the traditional history

of India refer to Dasyus, Daityas, Danvas, Rakshas, Vanaras, Asuras, Nagas, Nishadas and Yavnas with whom peace could not be purchased at any price inspite of the fact that peace messengers were fully men of peace. Even Mahatma Gandhi, a staunch believer in truth and non-violence, had to declare once that he was a man of peace, he believed in peace, but he did not want peace at any price. He did not want peace of the grave but peace that is embedded in human heart. The great battles of the Epics were fought when the peace missions of Angad and Shri Krishna failed to bring over Ravan and Duryodhan. Duryodhan did not agree to hand over even five villages for the maintenance of the Pandvas. He refused to part with any part of his kingdom even equal in size to the edge of a needle and ultimately preparations for war were made¹.

Justification Of War And War Efforts

Praying and working for peace all round has been our heritage as depicted by Yujur Veda hymn 17 chapter thirty-six². Even to-day, we are labouring assiduously in the cause of peace. There can, indeed, be no peace in the world unless there is peace in the hearts of men. It is plain commonsense, a psychological fact which we cannot escape. "Real peace must always rest on peace of mind," observed Nietzsche long ago, "while the so-called armed peace as it exists now in all countries is the lack of peace of mind which does not trust itself nor its neighbour and half from hatred, half from fear does not down its arms." How pertinent these words are even to-day. Man is conquering the air, harnessing the atom, mobilising natural forces, reaching out to outer space. But while he thus seems to be acquiring power over almost everything, he does not appear to have conquered himself. He cannot, so it seems, overcome selfish-

- (१) अविस्थलं वृक्षस्थलं माकन्धी वारणावतम् ।
 अवसानं च गोविन्द कञ्चिदेवात्र पञ्चमम् ॥
 पञ्च नस्तात दीयन्तां ग्रामा वा नगराणि वा ।
 वसेम सहिता ययुमा च नो भरता नशन् ॥
 ध्रियमाणे महाबाहो मयि सप्रति केशव ।
 यावद्धि लोक्षण्या सूच्या बिद्येदप्रेण केशव ।
 तावदप्यपरित्याज्यं भूमेनः पाण्डवान् प्रति ॥

(महा० उद्योगपर्वणि—भगवद् यान पर्व)

- (२) ॐ ह्योः शान्तिरन्तरिक्षं शान्तिः पृथिवी शान्तिरापः
 शान्तिरोषधयः शान्तिः ।
 वनस्पतयः शान्तिर्विद्मे देवाः शान्तिर्ब्रह्म शान्तिः
 सर्वं शान्तिः

शान्तिरेव शान्तिः सा मा शान्तिरेवि ॥

(यजु० ३६।१७७)

ness and vanity, envy and lust of power, hatred and fear. Yet as Emperor Ashoka said on the morrow of his triumph as he surveyed the battlefield strewn with the dead and dying, "true conquest is the conquest of self". We should, as civilized beings, learn to think in terms of harmony instead of victory, equality rather than domination, goodwill and not rancour. What avails our reaching the cosmos if there is to be chaos around us? We shall not be able to attain our own particular Heaven above unless we remove the hells from amidst us--dire poverty, disease and filth, ignorance and crime, fanaticism and strife. Even victorious Yudhishtira was driven to a sense of pessimism and renunciation because of the evil consequences of war in which practically the flower of the nation had been killed. Arjun, the great hero of many battles, had refused to fight, but he was reminded of his duty (Kshatra Dharma) by Shrikrishna. The great philosopher-statesman convinced Arjun that he was to perform his duty by fighting and stood to gain both ways whether he perished or survived. It was pointed out to Arjun that he was to attain Heaven if he was killed in action and was to enjoy the fruits of the kingdom on this earth if he fought and won¹. It is clear from such examples that war some times becomes necessary to establish the rule of Right over Wrong and to punish the guilty. There are several instances in our ancient history when martial spirit had to be displayed in full after the failure of sincere peace missions. Pressed by circumstances, it had to be a complete mobilisation of resources in men, money and material, because an Arya was never meant to be subject to slavery and defeatism. The great battles of Epic age contain the same atmosphere for a war. The two branches of the Kuru family fell out with each other owing to the perfidy of the Kaurava prince Duryodhan who refused all terms. The contest ended in a victory for the righteous Pandvas. The result of the battle has also an ethical note for triumph of the Pandav chivalry and religious principle over the craft and unscrupulousness of the Kauravas.

Though the Epics have undergone several priestly revisions and the technique of warfare these days is quite different from those of ancient days, yet they contain certain essentials of mobilisation for the war economy of any period. A picture of the war efforts and mobilisation of resources can be obtained by going through the details of the construction of a bridge between Lanka and Bharat, when Rama wanted to cross over to Lanka

(१) हतो वा प्राप्स्यसि स्वर्गं जित्वा वा भोक्ष्यसे महीम् ।
तस्माद्बुद्धिं क्रीतेषु युद्धाय कृतनिश्चयः ॥ (गीता २।३७)

to defeat the demon king Ravana¹. The defence of Dwarika against king Shalva by Pradumna, son of Vasudeva Shrikrishna, brings to our mind the adoption of scorched earth policy by Russians in the last war. It is pointed out in the Mahabharat that all possible obstructions were placed in the way of the enemy to check him from coming to our territory. Bridges were demolished, all key positions and vital points of the city were well guarded. Foodgrains and arms had been piled up and all precautions were taken to see that the morale of army was kept high. It was kept fully trained, in trim, well paid and satisfied². Shukracharya suggested an all-out mobilisation of the possible resources for the defence of the country. He had suggested that in times of emergency the king should borrow money on interest from the rich and when the emergency was over, the borrowed money should be returned in full. Shukra has discussed the characteristics of a well equipped army, the

- (१) मार्गमिच्छामि संन्यस्य दत्तं नदनवीपते ।
 येन गत्वा दशग्रीवं हृन्वां पोलस्त्यपांसनम् ॥
 यद्येवं याचतो मार्गं न प्रदास्यति मे भवान् ।
 शरैस्त्वां क्षोषयिष्यामि दिव्यास्त्रप्रतिमन्त्रितः ॥
 अस्ति त्वत्र नलो नाम वानरः शिल्पिसम्मतः ।
 त्वष्टुर्द्वयस्य तनयो बलवान् विद्वक्कर्मणः ॥
 सयत् काष्ठं तणं वापि शिलां वा क्षेप्स्यते मयि ।
 सर्वं तद् भारीयष्यामि स ते सेतुर्भविष्यति ॥
 तेनोपायनं काकुत्स्थः सेतुबन्धमकारयत् ।
 दशयोजनं विस्तारमायत्तं शतयोजनम् ॥
 नलसेतुरिति ख्यातो योऽद्यापि प्रथितो भुवि ।
 रामस्याज्ञां पुरस्कृत्य निर्यातो गिरि संनिभः ॥

(म० वनपर्वणि-रामोपाख्यान पर्व)

- (२) अरुण्यतां सुवुष्टात्मा सर्वतः पाण्डुनन्धन ।
 शाल्वो ब्रह्मायसं चापि तत् पुरं व्यूह्यविष्ठितः ॥
 सोपशाल्य प्रतलीका साट्टाट्टालकगोपुरा ।
 सचक्रग्रहणी चं च सोत्कालातावयोधिका ॥
 आनतदिग्ध तथा सर्वे नटा नर्तकगायनाः ।
 बहिर्निर्वासिताः क्षिप्रं रक्षद्भिर्विस्तसंचयम् ॥
 संक्रमा भेदिताः सर्वे नावदश्च प्रतिषेधिताः ।
 परिज्ञाश्चापि कीरव्य कालः सुनिचिताः कृताः ॥
 उदयानाः कुवभेष्ठ तर्षेवाप्यम्बरीषकाः ।
 समभ्यात् कोशमात्रं च कारिता विषमा चभूः ॥
 दत्तवेतनभक्तं च दत्तायुधपरिच्छदम् ।
 कृतोपधानं च तदा बलमासीन्महाभुज ॥
 न कुप्यवेतनी कश्चिन्न चातिक्रान्तवेतनी ।
 नानुग्रहभूतः कश्चिन्न चाष्टपराक्रमः ॥

(महा० वनपर्व, अ० १५)

different kinds of 'Vyuhās' (layout of the army) as well as certain canons of warfare by which it could be called a 'Dharma Yuddha'. He has also referred to 'Kuta Yuddha' where no principles of a fair warfare could be followed. He has cited examples of Rama, Krishna and Indra who by 'Kuta Yuddha' killed Bali, Kala Yavana and Namuchi¹. The 'Dharma Yuddha' of ancient times implied a certain code which had to be followed at the time of fighting. Manu has also referred to this type of ethical warfare². Bhishma Pitamah, a seasoned soldier and a commander of the battle of Mahabharat, instructed Yudhisra for making an all out effort, if the kingdom be attacked by an enemy. He suggested that the king should consult his friends and well wishers and caring first for his safety should decide future line of action. In case a war broke out, the king should shift all cattle-ranches from the forests to places of safety. The wealthy and the chief officers of the army should be stationed in places which are secret and not easily accessible. The king should himself look to the harvesting of ready crops and get them placed inside the forts. If this was not possible, the crops had to be burnt down. Bhishma had also suggested that the crops in the fields of the enemy should be destroyed so that the enemy becomes devoid of food resources and is weakened on the economic front. All bridges on the rivers and water reservoirs in the way of the enemy should be destroyed. If this is not possible, the water of the reservoirs must be polluted so that it can not be used by the enemy. All small trees and branches of big trees except those near the place of worship must be chopped off. The

- (१) येन केन प्रकारेण घनं सञ्चनयाम्यपः ।
 तेन संरक्षयेद्वाष्ट्रं बलं यज्ञादिकाः क्रियाः ॥
 यथाशत्रुं विनाशार्थं बलं संरक्षणोद्यतः ।
 विशिष्टबन्धं शत्रुकाविवर्जनं लोकान्वाहरेत् ॥
 घनिकेभ्योभूतिवत्त्वास्वापसीतद्धनं हरेत् ।
 राजास्वापत्समुत्तीर्णस्तत्संबन्धात्संबन्धकम् ॥
 धर्मयुद्धे तु कटुर्वेन सति नियमात्मनी ।
 न युद्धं कटुसंज्ञं नाशनं बलवद्विषोः ॥
 रामं कुण्डोद्वाहिवैवः कटुमेवावृत्तपुरा ।
 कटूनेन हृतो बालिर्यवनानामुचिस्तथा ॥

(शुक्र नी०, अ० ४)

- (२) न कटूरायुर्हृम्याद्युद्यमानो रणे रिपून् ।
 न कर्णभिर्नापि विष्वेनाग्निं ज्वलिततेजसः ॥
 न च हृम्यात्स्वलाकृष्टं न बलीबलं न कृताञ्जलिम् ।
 न मधुतकेशं नासीनं न तबास्मीति बाहिनम् ॥
 न सुप्तं न विसन्नाहं न नग्नं न निरायुधम् ।
 नायुध्यमानं पश्यन्तं न परेण समागतम् ॥
 नायुष्यसनप्राप्तं नार्तं नातिपरिक्षतम् ।
 न भीतं न परावृत्तं सतां धर्ममनुस्मरन् ॥

(मनु ७।१०-१३)

fort of the king should have large piles of fuels and good wells provided inside. The ditches around the fort should be filled with water and be infested with big crocodiles and other ferocious animals of water. All the city gates should be well defended with heavy mechanised artillery¹.

Among other suggestions, given by Bhishma, for intensive war efforts were included the plastering with clay of all thatched roofs of the houses. It was also pointed out that with the coming of the month of Chaitra, all easily inflammable material like grass, straw etc. should be removed from the city as well as the fields. During the state of emergency of a war, the people of the city should not burn fire carelessly. Fire should be burnt with care in the furnaces of blacksmiths and also in the nursing and maternity welfare centres. Fire should be kept covered inside the homes of the people and it should be proclaimed in the interest of defence that whosoever burns fire carelessly shall be punished. Bhishma advised Yudhishtra to keep away from the city, during the period of the war, all beggars, drivers of carts, eunuchs, mad men and dramatists, because they could bring great

- (१) यदा तु पीडितो राजा भवेद् राज्ञा बलीयसा ।
 तदाभिसंभवेद् दुर्गं बुद्धिमान् पृथिवीपतिः ॥
 विधावाकस्य मित्राणि विधानमुपकल्पयेत् ।
 सामभेदान् विरोधाच्च विधानमुपकल्पयेत् ॥
 घोषान् न्यसेत् मार्गेषु ग्रामान्स्थापयेदपि ।
 प्रवेशयेच्च तान् सर्वान् ज्ञानानगरं केचपि ॥
 ये गुप्ताश्चैव दुर्गाश्च वेशास्तेषु प्रवेशयेत् ।
 धनिनो बलमूर्ख्याश्च सान्त्वयित्वा पुनः पुनः ॥
 शस्याभिहारं कुर्याच्च स्वयमेव नराधिपः ।
 असम्भवे प्रवेशस्य बहेव् वावाग्निना भूषाम् ॥
 क्षेत्रे स्थेषु च सस्येषु शत्रोरुपजयेन्नरान् ।
 विनाशयेद् वा तत् सर्वं बलेनाथ स्वकेन वा ॥
 नदी मार्गेषु च तथा संक्रमानवसादयेत् ।
 जलं विस्त्रावयेत् सर्वम्विस्त्राभ्यं च दूषयेत् ॥
 दुर्गाणां चाभितो राजा मूलच्छेदं प्रकाशयेत् ।
 सर्वेषां क्षुद्रवृक्षाणां चैत्यवृक्षान् विवर्जयेत् ॥
 प्रवृद्धानां च वृक्षाणां शाखां प्रच्छेदयेत् तथा ।
 चैत्यानां सर्वेषां त्याज्यमपि पत्रस्य पातनम् ॥
 प्रगण्डीः कारयेत् सम्यगाकाशजननीस्तदा ।
 आपूरयेच्च परिक्षां स्थाणुनक्षत्राकुलाम् ॥
 द्वारेषु च गुरुण्येव यन्त्राणि स्थापयेत् सदा ।
 आरोपयेच्छतघ्नीश्च स्वाधीनानि च कारयेत् ॥
 काष्ठानि चाभिहार्याणि तथा कृपांश्च क्षानयेत् ।
 संशोषयेत् तथा कृपान् कृतपूर्वान् पयोर्जिह्विभिः ॥

calamities to the city. The king was asked to keep his capable spies in the city squares, holy places, big assemblies of people and Dharmashalas to know the psychology of the people. The king was to get broad roads constructed and suitable markets established. Store houses of foodgrains, the armoury, residence for soldiers, horses and elephants, the military camps, ditches, streets and gardens of the palace were to be constructed secretly without being observed by others. In times of aggression, the king was to make all possible efforts to collect money and material including all kinds of oil, fat, honey, ghee and different kinds of medicines for the treatment of the wounded. All kinds of arms and armaments including different types of poisoned arrows were to be requisitioned by the king and he was to make efforts to get into his kingdom all types of Vaidyas who could treat different types of ailments¹. The king was to remove all types of suspicion of his ministers, employees and the citizens of the state to win over their confidence.

Bhishma ended this discussion by suggesting to Yudhishtira that after the calamity and abnormal period was over, the king ought to reward those who co-operated in full in facing the critical

- (१) तणच्छन्नानि वेदमानि पङ्केनाथ प्रलेपयेत् ।
 निर्हरेच्च तृणं मासि चंत्रे वृद्धिभयात् तथा ॥
 कर्मरारिष्टशालासु ज्वलेदग्निः सुरक्षितः ।
 गृहाणि च प्रवेश्यान्तर्विधेयः स्यादुत्तानः ॥
 महादण्डश्च तस्य स्याद् यस्याग्निर्वैद्विषाभवेत् ।
 प्रघोषयेदर्थं च रक्षणार्थं पुरस्य च ॥
 भिक्षुकांश्चाक्रिकांश्चैव क्लीबोन्मत्तान् कुशोलवान् ।
 बाह्यान् कुर्यान्निरभेष्ट वीषाय स्युर्ह तेऽप्यथा ॥
 चत्वरैश्चैव तीर्थेषु सभास्वावसथेषु च ।
 यथार्थवर्णं प्रणिधि कुर्यात् सर्वस्य पार्थिवः ॥
 भाण्डागारायुषागारान् योषागारांश्च सर्वशः ।
 अश्वगारान् गजागारान् बलाधिकरणानि च ॥
 परित्तादर्थं च कीरव्य प्रतोलीनिष्कुटानि च ।
 न जास्वन्मयः प्रपश्येत् गृहमेतद् युधिष्ठिर ॥
 अर्थसंनिधयं कुर्याद् राजा परबलादितः ।
 तलं वसा मघु घृतमोषधानि च सर्वशः ॥
 अङ्गार कुशमृज्जानां पलाशशर्खणिनाम् ।
 यवसेन्धनविश्वानां कारयीत च संचयान् ॥
 आपुषानां च सर्वेषां शक्यद्विष्टप्रासवर्णानाम् ।
 संचयानेवमादीनां कारयीत नराधिपः ॥
 ओषधानि च सर्वाणि मलानि च फलानि च ।
 चतुर्विधांश्च वंद्यान्वं संगृह्णीयाद् विशेषतः ॥

situation. In normal times, dramatists and wrestlers were to be permitted by the king, because they entertained the people with different kinds of amusements. It was clearly pointed out that the king who cared for the seven elements of the state and knew the six 'Gunas', the three 'Vargas' and the six 'Param Vargas' could enjoy the kingdom of this Earth¹. The battle of the Mahabharat was undoubtedly a great battle in which titans clashed and the earth trembled for fear of cracking. 'Kuta Yuddha' was resorted to, but the well-trained kshatrya generally adhered to the norm of the battlefield. It is recorded at the very outset of the Bhishma Parva of the Mahabharat, that certain canons of warfare had to be followed by the combatants concerned. If we analyse these principles of fighting, we may come to the conclusion that bombing of peace-loving citizens of the state, away from the centres of warfare, could never be justified as was done during the last war by bombing the important Japanese towns of Nagasaki and Hiroshima².

(१) यतः शङ्कु भवेच्चापि भृत्यतोऽपि मन्त्रितः ।

पीरेभ्यो नृपतेर्वापि स्वाधीनान् कारयेत् तान् ॥

(महा० शान्तिपर्व, अ० ६९)

नटांश्च नर्तकांश्चैव मल्लान् मायाविनस्तथा ।

शोभयेयुः पुरवरं मोदयेयुश्च सर्वशः ॥

(महा० शान्तिपर्व, अ० ६९)

कृते कर्मणि राजेन्द्र पूजयेद् धनसंघयः ।

दानेन च यथाहूण सान्त्वेन विविधेन च ॥

राज्ञा सप्तैव रक्ष्याणि तानि खंभ निबोध मे ।

आत्मा मात्या च कोशाश्च वण्डो मित्राणि खंभ हि ॥

तथा जनपदाश्चैव पुरं च कुरुनन्दन ।

एतत् साप्तात्मकं राज्यं परिपाल्यं प्रयत्नतः ॥

बाहुगुण्यं च त्रिवर्गं च त्रिवर्गपरमं तथा ।

यो वेत्ति पुरुषस्याग्नौ स भुङ्क्ते पृथिवीभिमाम् ॥

(महा० शान्तिपर्व, अ० ६९)

(२) निवृत्ते विहिते युद्धे स्यात् प्रीतिर्नः परस्परम् ।

यथापरं यथायोगं न च स्यात् कस्यचित् पुनः ॥

वाक्चा युद्धप्रवृत्तानां वार्त्तव्यं प्रतियोगनम् ।

निष्काभ्ताः पृतनामध्यास हस्तव्याः कदाचन ॥

रथो च रथिना योऽथो गजं गजधूर्गतः ।

अश्वेनाश्वी पदातिश्च पादातिर्नैव भारत ॥

यथायोगं यथाकामं यथोत्साहं यथाबलम् ।

समाभाष्य प्रहर्तव्यं न विद्वस्ते न विद्वले ॥

एकेन सह संयुक्तः प्रपन्नो विमुक्तस्तथा ।

क्षीणशस्त्रो विवर्मा च न हस्तव्यः कदाचन ॥

शेषे अगले पृष्ठे पर

Kautalya has discussed very exhaustively the fundamentals of a policy concerning peace and exertion. He has pointed out that acquisition and security of property are dependent upon peace and industry. Kautalya believed that causes both human and providential governed the world and its affairs, but he has discussed the details of six-fold policy, the nature of alliance, the character of equal, inferior and superior kings, considerations about the troubles of the king and his kingdom, the group of troubles of the army, the knowledge of power, place, strength at the time of invasion. External and internal dangers, considerations about the loss of men, persons associated with traitors and enemies, the employment of alternative strategic means, march of the camp, protection of the army in times of distress and attack, forms of treacherous fights, the distinctive array of troops in respect of wings, flanks and front, the array of the army like a staff, a snake, a circle or in detached order, the array of the army against that of any enemy, causes of dissension, battle of intrigues and capture of the enemy by means of secret contrivances or by means of the army and thus to gain complete victory have been discussed by Kautalya. He has also given a classification of an open, treacherous and silent battle to gain victory¹.

न सूतेषु न धर्मेषु न च शस्त्रोपनायिषु ।
न भरीशङ्ख वादेषु प्रहृतं व्यं कथंचन ॥
एवं ते समयं कृत्वा कुरपाण्डवसोमकाः ॥
विस्मयं परमं जग्मुः प्रक्षमाणाः परस्परम् ।

(महा० भीष्मपर्वः अ० १)

- (१) शमव्यायामो योगक्षेमयोर्वीनिः ॥ षाड् गुण्यसमुद्देशः क्षय स्थानं वृद्धिनिश्चयः ॥ संभय वृत्तिः ॥ समहीमज्यायसां गुणाभिनिवेशः हीनसंशयश्च ॥ विगृह्यासनं सन्ध्यायसनं विगृह्यासनं, सन्ध्यायसनं सम्भयप्रमाणम् ॥ मध्यम चरितमुदासीन चरितं मण्डल चरितम् ॥ प्रकृतिव्यसन वर्गः ॥ राजराज्ययोर्व्यसन चिन्ता ॥ पुरुष व्यसन वर्गः ॥ शक्ति देशकाल बलाबल ज्ञानम् यात्रा-कालः ॥ बलोपादन कालाः संनाह गुणाः प्रतिबलकर्म ॥ पश्चात्कोपचिन्ता बाह्याभ्यन्तर प्रकृति कोप प्रतीकारः ॥ स्कन्धावार निवेशः ॥ स्कन्धावारप्रमाणं तथा बलव्यसनावस्कन्धकाल रक्षणम् ॥ पक्ष कक्षोरस्यानां बलाप्रतो व्यूहविभागः सार फलगुणविभागः ॥ दण्डभोग मण्डलासंहत व्यूह व्यूहनं तस्यप्रति व्यूह स्थानम् ॥ भेदापादा नान्युपाशुवण्डः ॥ अपसर्प प्राणविः ॥ पश्चात्प्रयोग ॥ प्रलम्भनम् ॥

प्रकाश युद्धं निविष्टो देशे काले विक्रमः ।
विभीषणमवस्कन्धः प्रमादव्यसनादं नम् ॥
एकत्र त्यागगती च कटयुद्धस्य मातृका ।
योगगुह्योपजापार्थ तूष्णीयुद्धस्य लक्षणम् ॥

(को० अर्थशास्त्र, अधि० ७-१०)

These exhaustive details given by Kautalya for mobilisation of resources against an enemy should not lead us to believe that he was simply a war-monger and did not know of peace and neutrality. He has discussed both about peace and war by adopting a double policy. He has discussed about neutrality and concluding a treaty of peace with the enemy. It has been pointed out in Chapter XVII Book VII of the Arthashastra, that the words--Sam, Sandhi and Samadhi are synonymous. That which is conducive to mutual faith among kings is termed Sam, Sandhi or Samadhi. He has pointed out that peace dependent upon honesty or oath is immutable in this or the next world. Honest kings of old made their agreement of peace with the declaration--'we have joined in peace'. In case of any apprehension of breach of honesty and peace, they made their agreement by swearing by fire, water, plough, the brick of fortwall, the shoulder of an elephant, the hips of a horse, the front of a chariot, a weapon, seeds, scents, juice, wrought gold or bullion gold and by declaring that these things will destroy and desert him who violates the oath. In order to avoid the contingency of violation of oath, peace made with the security of such persons as ascetics engaged in penance or nobles was peace with security¹. Kautalya has also discussed about restoration of peace in a conquered country. He has pointed out that after acquiring a new territory, the conqueror should cover the enemy's vices with his own virtues, by strict observance of his own duties, by attending to his work, by bestowing rewards, by remitting taxes, by giving gifts and by covering his enemy's virtues by doubling his own virtues².

It has also been suggested by Kautalya that a king who conquers an enemy's territory should follow the leaders of the people to maintain peace. He should reward those who deserted the enemy for his cause and should adopt the same mode of life, the same dress, language and customs as those of the people of the territory. He should follow the people in their faith with which they celebrate their national, religious and congregational

(१) शमः संधिः समाधिरित्ये कोऽर्थः ॥ राज्ञां विश्वासोपगमः शमः संधिः समाधिरिति ॥ सत्यं व क्षपथो वा परब्रह्म च स्थावरः संधिः ॥ पूर्वं राजानः सत्येन संवधिरे ॥ तस्यातिक्रमे क्षपथेन । अग्न्युदकसंज्ञाप्रकारलोष्टहस्तिस्कन्धाश्चपृष्ठरथोपरशस्त्ररत्नबीजगन्ध रससुवर्ण हिरण्यन्यालेभिरं ॥ हन्युरेतानित्यजेयुश्चैनं यः क्षपथ मतिक्रामेदिति ॥ क्षपथातिक्रमे महतां तपस्विनां मुख्यानां वा प्रातिभाव्यबन्धः प्रति भूः ॥ (को० ७।१७)

(२) अटव्यादिकमेकग्रामदिकं च ॥ त्रिविधश्चास्य लम्भः नवो भूतपूर्वः पित्र्य इति ॥ नवमवाप्य लाभं परदोषान्स्वगुणं दद्यात् गुणान्गुणद्वे गुण्येन ॥ (को० १३।५)

festivals. His spies should often bring home to the mind of leaders of provinces, villages, Castes and Corporations, the hurt inflicted on the enemy in contrast with the high esteem with which they are treated by the conqueror. He should hold religious life in high esteem. Learned men, orators, charitable and brave persons should be favoured with gifts of land and money and with remissions of taxes. He should release prisoners and should afford help to miserable, helpless and diseased persons. He should abolish those customs and transactions which are injurious to the growth of his revenue and army and should establish righteous transactions. He should compel born thieves and other undesirable persons to change their habitations often. After having re-covered a lost territory, the king should hide those vices owing to which he lost and increase those virtues by which he recovered. With regard to the inherited territory, the king should cover the vices of his father and display his own virtues¹.

These observations of Kautalya and several references of the Mahabharat are sufficient to convince the statesmen of our country that leaders of people in ancient India loved peace, but could advise going to war when it became necessary. Our defence ministers, Mr. Krishna Menon, has described the armed forces of India as the 'Gandhian army' whose aim is peace and not war, but in case an emergency arises and peace cannot be maintained at any cost and Indis's interests are endangered, we shall have to need courage, determination and ideals as practised by our ancestors. A people who are trying to regain vitality, strength and unity will have to give a clarion call to the peace soldiers of the nation, in the way in which Shrikrishna exhorted Arjun, to defend country's liberty, honour and glory.

(१) द्विविधं विजिगीषोः समुत्थानम् ॥ स्वधर्मकर्मानुग्रहपरिहारं दानमानं कर्मभिश्च प्रकृतिप्रियहिताभ्यनुवर्तते ॥ यथासंभाषितं कृत्यपक्षमुपग्राहयेत् ॥ भूयश्च कृतप्रयासम् ॥ अविद्वद्वाच्यो हि विसंवादकः स्वेषां परेषां च भवति प्रकृतिविद्वद्भाषारश्च ॥ तस्मात्प्रमानशोलवेषभाषाचारतामुपगच्छेत् ॥ देशदेवतसमाजोत्सवविहारेषु च भक्तिमनुवर्तते ॥ नवमवाप्य लाभं परदोषस्त्वगुणदंष्ट्रादयेषु गुणान्गुणद्वन्द्वगुणेन ॥ देशप्राप्तजातिसंघमनुष्येषु चाभीक्ष्णं सतिव्रजः परस्यापचारं वक्ष्येयः ॥ महाभाग्यं भवितुं च तेषु स्वामिनः स्वामिसत्कारं च विद्यामानम् ॥ उचितंश्चनान्भोगपरिहारं रक्षावेक्षणं भुञ्जीत ॥ सर्वदेवता भ्रमपूजनं च विद्यावाक्यधर्मशूरपुरुषाणां च भूमिद्वन्द्वदानपरिहारान्कारयेत् ॥ सर्ववन्धनमोक्षणमनुग्रहं दोनानाथव्याधि तानां च ॥ चोरप्रकृतीनां श्लेष्मज्जातीनां च स्थानविपर्ययसमने कस्यं कारयेत् ॥ भूतपूर्वं येन दोषेणापवृत्तस्तं प्रकृतिदोषं छादयेत् ॥ येन च गुणेनोपावृत्तस्तं तीव्रीकुर्यादिति ॥ पित्र्ये पितृदोषादंष्ट्रादयेषु ॥ गुणांश्च प्रकाशयेदिति ॥

(को० १३।५)

CHAPTER XIV

PLANNING OF TOWNS AND VILLAGES

अष्टाङ्का नवद्वारा देवानां पुरयोध्या ।
तस्यां हिरण्ययः कोशः स्वर्गो ज्योतिषावृतः ॥
तस्मिन् हिरण्यये कोशे त्र्यरे त्रिप्रतिष्ठिते ।
तस्मिन् यद् यक्षमात्मन्वत् तद् ब्रह्मविदो विदुः ॥

(अथर्व० १०।२।३१, ३२)

अयोध्या नाम नगरी तत्रासील्लोकविभृता ।
मनुना मानवेन्द्रेण या पुरी निमिता स्वयम् ॥
आयता दश च द्वे च योजनानि महापुरी ।
श्रीमती श्रीणि विस्तीर्णा सुविभक्तमहापथा ॥
राजमार्गेण सहता सुविभक्तेन शोभिता ।
मुक्तपुष्पावकीर्णन जलसक्तेन नित्यशः ॥ (रा० बालकांड)
अष्टयोजनविस्तीर्णमचलां द्वादशायताम् ।
द्विगुणोपनिवेशं च ददर्श द्वारकां पुरीम् ॥
अष्टभागां महाकक्ष्यां महाषोडशचत्वराम् ।
एवं मार्गपरिक्षितां साक्षादुशनसा कृताम् ॥ (म० सभापर्व, अ० ३८)
करत्रयात्मिकापद्यावीधिः पंचकरात्मिका ।
मार्गोदशकरः प्रोक्तोप्राप्तेषु नगरेषु च ॥ (शु० नी० १।२६१)

Role of Planning

The last half-century has witnessed a widening of social ideals. There is now a great awareness of and insistence on certain basic values and it is believed that all-round progress cannot be attained without planning of social and economic life of the people. Economic planning has become the political religion of the day and is supposed to be the panacea for all our ills. The activities of human planning are many, their scope immense. The activity which is related to most other aspects of planning is the planning of towns and villages. It has been said that 'Man builds the city so that the city shall build his sons'. The implication throws light on the building of character or the making of good citizens and citizenship. The major problems of cities throughout the world, whether they be in America, Europe or Asia are basically the same viz. (a) traffic congestion (b) over-population and lack of housing with its resultant slums and

social decay. Maintenance of urban sanitation constitutes one of the most difficult problems of modern civilised life. The economic set-up in the country has gone through a gradual change which has resulted in a gradual migration from rural to urban areas. The haphazard, insanitary and ugly growth of some of the principal cities of our country, due to lack of careful planning, has complicated socio-economic factors which influence large scale urbanisation. The evolution of industries during the British regime had been left to the blind economic forces or in Adam Smith's words to the 'Invisible hand'. Eighty percent of the total industrialisation is concentrated in the two cities of Bombay and Calcutta. This concentration and lack of planning of these two important cities has led to over-crowding, congested areas, slums and a crop of social and economic problems. The absence of parks and halls in a great city like Bombay, which is among the few big cities of the world, shows lack of planning and civic consciousness. Slums are another problem, which are a constant slur on the city. The only way to solve such problems is to draw up a master plan of what Bombay city should be after half a century or so. Both in urban and rural areas, housing is a problem of vast dimensions. There are 54 million houses in rural areas, of which a large number need re-conditioning or re-building. Town and country planning and the preparation of master plans for all urban areas are essential, if the dangers of haphazard and unplanned growth are to be met. The Board of Trade and local Town and Country Planning Authorities should jointly decide the location of industries, lay-out, housing facilities and all questions pertaining to the social amenities of life.

Ancient Concept of Planning

The close connection of the geometrical system with Vedic sacrificial lore is an indirect proof of the great antiquity of Indian science of village and town planning. The sites of the villages were carefully chosen according to principles, ritualisation and sanitary conditions. They were generally on the banks of a river, by the sea-shore or the site of a lake so that ample bathing facilities were easily available. Bathing was regarded as a religious rite in itself and a necessary preliminary for sacrificial rites. Villages were marked out by their natural boundaries such as forests, rivulets, hills and rocks. The village proper consisted of houses—mostly beautiful cottages covered with a roofing of reed and straw. A hymn from Atharva-Veda gives an idea

of such housing in those days¹. The art and science of town planning dates back to the oldest civilization. The principles involved in town planning change with times and requirements of the people. Things which were considered sound in the past would perhaps be considered inadvisable by the town-planner of to-day. For instance, in olden days the palace of the king was kept as the focal point in planning, where as to-day it is the requirements of the people which are kept uppermost in the minds of the planners. The civic centre, in modern planning, occupies the most convenient place in the master plan of a city. Town planning, in ancient India, was based on certain basic rules such as the orientation of main streets, the sub-division of the city area and the width of the streets. The city, specially the capital city, was the creation of careful forethought and planning. Most of the capital cities had forts and other defensive works. Cities were adorned with temples, roads, footpaths, pleasure gardens, big tanks, brilliant shops and various places of amusements. Elaborate regulations were laid down for proper sanitary arrangements and to prevent such calamities as the out-break of fire.

A description of Indraprastha, as given in the Adi-Parva of the Mahabharat, is a sufficient proof that towns were beautifully planned in ancient India². A visitor to the ruins of

- (१) तूर्णरावृता पलवान् वसाना रात्रीव शाला जगतो निवेशनी ।
मिता पृथिव्यां तिष्ठसि हस्तिनीव पट्वती ॥
या द्विपक्षा चतुष्पक्षा या निमीयते ।
अष्टापक्षां दशपक्षां शालां मानस्य पत्नीमग्निगर्भं इवा शये ॥

(अथर्व० १।३।१७, २१)

- (२) विद्वक्कर्मन् महाप्राज्ञ अष्टप्रभृति तत्पुरम् ।
इन्द्रप्रस्थमिति ख्यातं विद्वं रम्यं भविष्यति ॥
सागरप्रतिरूपाभिः परिष्ठाभिरलंकृतम् ।
प्राकारेण च सम्पन्नं दिवमावृत्य तिष्ठता ॥
आयतंश्च महाचक्रं शशुभे तत् पुरोत्तमम् ।
सुविभक्तमहारथ्यं देवता बाधवर्जितम् ॥
निवासं रोचयन्ति स्म सर्वभाषाविदस्तथा ।
वणिजइचाययस्तत्र नानादिग्भ्यो धनार्थिनः ॥
रम्याश्च विविधास्तत्र पुष्करिण्यो वनावृताः ।
तडागानि च रम्याणि बहूनि सुबहूनि च ॥
चातुर्वर्ण्यसमाकीर्णं मार्ग्यः शिल्पिभिर्वावृतम् ।
उपयोगसमर्थश्च सर्वद्रव्यः समावृतम् ॥
तेषां पुण्यजनोपेतं राष्ट्रमाविशतां महत् ।
पाण्डवानां महाराज शश्वत् प्रीतिरवर्धत ॥

(महा० आदिपर्व, अ० २०६)

Mohenjodaro is struck by the remarkable skill in town-planning and sanitation displayed by the ancients and as an English writer has observed “feels himself surrounded by ruins of some present day working town in Lancashire”. The city was entered from the North and South by the first street which is amply wide for both wheeled traffic and pedestrians. East street, which is the main thoroughfare through the ruins, is wider than the first street. The city was the creation of careful forethought and planning as is indicated by the striking regularity of the divisions, the successfully aligned streets, the orientation of all principal streets to the points of the compass. Streets varied from 9 feet to 34 feet in width and ran straight sometimes as far as half a mile. The city had an elaborate drainage system consisting of horizontal and vertical drains, street drains, soak pits. The architecture of Mohenjodaro is plain and utilitarian, rather solid than beautiful. Harappa is larger in extent than Mohenjodaro and the most remarkable and largest building at Harappa is the great granary measuring 169 feet by 135 feet. The open court was the basic feature of house planning and the elaborate drainage system is a unique feature of the Indus Valley civilisation the like of which has not yet been found by archaeologists in any other city of the same antiquity¹.

Capital Cities

Manu has given indications for the construction of the capital city of a king mostly on defence considerations². Shukracharya has discussed planning of both villages and towns and capital city of a king. According to Shukra, villages were to be classified on the basis of their size—Kumbha, Palli and Gram. Care was taken for lay-out of the villages, sanitation, defence and development of agriculture and industry. Houses were to be constructed beautifully on both sides of the lanes which were to be wide enough for pathways and general traffic. Shukra has described impressively the site of a capital town and the construction of a royal palace together with the construction of

(1) The Indus Valley Civilisation—Vedic Age. (Bhartiya Vidya Bhawan Bombay)

(२) जाङ्गलं सस्यसम्पन्नमायं प्रायमनाविलम् ।

रम्यमानत सामन्तं स्वाजीभ्यं देशमावसेत् ॥

अश्वकुलं महीकुलं मनुकुलं वाक्षमेव वा ।

नृवर्गं गिरिकुलं वा समाभिस्य वसेत् पुरम् ॥

houses for other people in the capital city¹. Ancient India possessed a good number of beautiful and flourishing centres of population in the form of capital cities as is clear from several references in the Epics to the cities of Ayodhya, Dwarika, Indraprastha, Mithilapuri and Lanka, which were carefully planned and laid out². Panini has also referred to some impor-

- (१) भवेत्क्रोशात्मकोग्रामोऽप्यकथं स हस्तकः ।
 ग्रामार्धकपल्लिसंज्ञपल्लयर्धं कुम्भसंज्ञकम् ॥
 निवेशनं पुरे ग्रामे प्रागुक्तं नृणामेव वा ।
 सजातिपण्यनिबर्हुरापणे पण्यवेशनम् ॥
 धनिकादि क्रमेण वराजमार्गस्य पाद्वयोः ।
 पूर्वहिपसनं कुर्वाद्ग्रामचंवनराधिपः ॥
 राजमार्गास्तु कतं व्यादधत्तुर्विज्ञानपगृहात् ।
 उत्तमो राजमार्गस्तु त्रिंशद्विंशतिमिती भवेत् ॥
 नानावृक्षलताकीर्णं पशुपक्षि गणावृते ।
 सबहुवकधाम्ये चतुर्णां कृष्णसुखे सदा ॥
 आसिद्धनोगमाकलेनातिदूरमहीधरे ।
 सुरम्यसमभूदेशे राजधानीं प्रकल्पयेत् ॥
 अर्धचंद्रावर्तलां वा चतुरस्तां सुशोभनाम् ।
 सप्रकारां सपरिष्ठां ग्रामादीनां निवेशनीम् ॥
 बृहत्पुरालयमठपांश्च शालाविराजिताम् ।
 कल्पयित्वा वसेत् सत्रसुगुप्तः सप्रजो नृपः ॥ (शकुनीति, अ० १।१९२-२५८)

- (२) कपाटतोरणवतीं सुविभक्तान्तरापणाम् ।
 सर्वयन्त्रायुधवतीं चित्तां सर्वशिल्पिभिः ॥
 दुर्गगभीरपरिष्ठां दुर्गमिभ्यं दूरसहाम् ।
 नानावेशनिवासंश्च वणिग्मिरूपशोभिताम् ॥
 (अथोप्यायाः समृद्धिर्वा० का०)

तां पुरीं द्वारकां दृष्ट्वा विभर्तारायणो हरिः ।
 दृष्टः सर्वायं संपन्नां प्रवेष्टुमुप चक्रमे ॥
 महापुरीं द्वारवतीं पञ्चाशद्भिर्मूर्त्युयुताम् ।
 प्रविष्टो द्वारकां रम्यां भासयन्तीं समन्ततः ॥
 व्यूहानामन्तरा मार्गाः सप्त चैव महापथाः ।
 तत्र सा विहिता साक्षात्तगरीविश्वकर्मणा ॥
 (महा० सभापर्व, अ० ३८)

गोपुराट्टालकवतीं हर्म्यप्राकारं शोभनाम् ।
 प्रविश्य नगरीं रम्यां विमानं बहुभिर्युताम् ॥
 पण्यंश्च बहुभिर्युक्तां सुविभक्तमहापणाम् ॥
 (महा० वनपर्व, अ० २०७)

गत्वा पारं समुद्रस्य वणिजं स घटोरकचः ।
 दवशं लङ्कां राजन्त्र नाकपृष्ठोपमां शुभाम् ॥
 प्राकारेणावृतां रम्यां शुभद्वारंश्च शोभिताम् ।
 प्रासादं च साहस्यं श्वेतरवतंश्च संकुलाम् ॥
 (महा० सभापर्व, अ० ३१)

tant towns viz. Takshila, Sakala, Hastinapur, Sankhasya and Kosi. The existence of these cities on a scientific basis indicated a knowledge of the art of town planning and architecture. The most important parts of a city were its moat (Parikha), rampart (Prakar) and gates which served as the main defences. It is believed that some sort of planning preceded the actual work of construction¹.

Architecture

It is a great and ancient art. It has been with man, of man, since the beginning of his civilised existence. Good architecture exerts its influence from the life of an individual to that of the family, the village, the town, the city and the community or the nation. The periods of civilisation which set much price on architecture as the visible expression of their social and cultural values have left bright imprints on the pages of time. Town-planning and good architecture is an art which is not new to India. In our country, it occupied a prominent place in the aesthetic life of the people from ancient times. From descriptions given in our ancient literature, we can picture a well laid-out city equipped with all facilities and with a multitude of buildings both for its defence and for the practical needs of residence and business. The fortifications consisted of the moat, parapet wall and gateways. While the civil architecture had its residential buildings, the romance and wonder of the royal architecture can be judged by studying the details of the great assembly hall constructed by Maya Danava for king Yudhishtira. The architecture displayed by Maya Danava, it appears, arose from the trinity of structure, utility and aesthetics².

(1) India as known to Panini— Dr. V. S. Agarwal.

- (२) विभ्रतां त्रिषु लोकेषु पार्श्वे दिव्यां सभां तव ।
 प्राणिनां विस्मयकरो तव प्रीतिविर्वाचनीम् ॥
 पाण्डवानां च सर्वेषां करिष्यामि धनंजय ।
 वसन् दुर्योधनस्तस्यां सभायां पुरुषर्षभ ।
 शनैर्बन्धसां तां सर्वां सभां शकुनिना सह ॥
 स कदाचित् सभामग्नये घातं राण्डो महीपतिः ।
 स्फाटिकं स्थलमासाद्य जलमित्यभिज्ञाकुर्यात् ॥
 स्ववस्त्रोत्कर्षणं राजा कृतवान् बुद्धिमोहितः ।
 दुर्मना विमुञ्चद्वैव परिचक्राम तां सभाम् ॥
 ततः स्फाटिकतोयां वै स्फाटिकाम्बुजशोभिताम् ।
 चापौ मत्वा स्थलमिव सबासाः प्रापतज्जले ॥

(महा० सभापर्व, अ० ३, ४७)

The capital town of Magadha, in the days of king Jarasandha, was beautifully built as indicated by a reference in the Mahabharat. The old capital of Magadha was called Girivraja or Rajgir¹. Megasthene has given a similar account of the capital city of Mauryan India. Under Chandra Gupta Maurya, known to the Greeks as Sandrokotos, Pataliputra became the capital of Northern India. The capital city was planned on a magnificent scale on the auspicious site formed by the confluence of the Son with the Ganga. Like the Indo-Aryan cities, it had a long river front extending for about 9 miles. The breadth of the city was a mile and a half. Its massive timber walls were defended by brick-lined moats and by lofty towers built over 64 gates. The royal palace, which occupied a central position, was placed in a fine park with fountains and fish ponds. The present city of Patna, the Capital of Bihar, stands on the site of the ancient metropolitan Pataliputra of Magadha.

Formation of Villages

There seems to be an absence of many large cities during Chandra Gupta's period and people lived invariably in villages which were generally separated from each other by large stretches of forests or woodlands. Kautilya's indications on the formation of villages go to prove this conclusion. There was a definite grouping of villages made both for economic purposes and for national defence. Among every ten villages, there was a central one, adequately fortified which served as a common market and a rallying place in times of war. A country or district containing two hundred villages had also its central market and fort called a 'Kharvatika', a larger district containing four hundred villages had a 'Dronamukha' as its centre, while the chief provincial capital around which eight hundred villages were grouped was strongly defended by a fortress called

- (१) एषपार्थ महान् भाति पञ्चमान् नित्यमम्बुमान् ।
 निरामयः सुवेष्टमादयो निवेष्टो मागधः क्षभः ॥
 एते पञ्च महाभुङ्गाः पर्वताः शीतलद्रुमाः ।
 रक्षन्तीवाभिसंहस्य संहताङ्गा गिरिव्रजम् ॥
 एवं प्राप्य पुरं रम्यं दुराघर्षं समन्ततः ।
 अर्थसिद्धिं त्वनूपमां जरासंधोऽभिमन्यते ॥
 तान् तु दृष्ट्वा समृद्धिं ते बोध्यां तस्यां नरोत्तमाः ।
 राजमार्गेण गच्छन्तः कृष्णभीमघनंजयाः ।
 बलाद् गृहीत्वा माल्यानि मालाकारान् महाबलाः ॥

‘Sthaniya’. The capital city of the country, Pataliputra, and the royal palace therein were planned on ancient traditions under Kautalya’s inspiring statesmanship¹. There were to be forts in the extremities of the kingdom manned by boundary guards whose duty was to guard the entrance into the kingdom. The interior of the kingdom was to be watched by trap-keepers, archers, hunters, chandalas and wild tribes. Superintendents, accountants and gopas, sthanikas, veterinary surgeons, physicians, horse trainers and messengers were to be endowed with lands in the villages which they had no right to alienate by sale or mortgage².

Discussing the formation of villages, Kautalya has pointed out that the king was to construct villages either on new sites or on old ruins by inducing foreigners to immigrate or by causing the thickly populated centres of his kingdom to send forth the excessive population. Villages consisting of not less than a hundred families each and not more than five hundred families of agricultural people, with boundaries extending as far as a krosha or two, were to be formed. Boundaries were to be denoted by river, a mountain, forests, bulbous plants, caves, artificial buildings or by trees such as Salmali, Sami and kshir Vraksha³. Gandhiji believed that the heart of India lies in villages and the real prosperity of the country depends upon the prosperity of the villages. Even with the development of industries and allurements of city life, the major population of India to-day is rural. But many of the villages lack the elementary amenities of life such as proper sanitation and water supply, good housing, roads etc. To revitalise the life in the villages, it is essential that planning of these villages is not neglected which have suffered much during the British regime. Many villages of the country are centres of dirt, dearth, disease, ignorance and

(१) अष्टशतग्राम्या मध्ये स्थनीयं चतुः शतग्राम्या द्रोणमुखं ।
द्विशतग्राम्या कार्वाटिकं दशग्रामीसंग्रहेण सप्तहर्णं स्थापयेत् ॥

(कौ० २।१)

(२) अन्तेष्वन्तपालदुर्गाणि ॥ जनपद द्वाराभ्यन्त पालाधिष्ठितानि स्थापयेत् ॥
तेषामन्तराणि बागुरिकशबर पुलिन्ध चण्डालारण्यचरा रक्षेयुः ॥ अय्यसत्संख्याय-
कादिभ्यो गोपस्थानिनानाकस्यचिकित्सकाश्चवसकजङ्गालकेभ्यश्च विक्रयाधान-
वर्जम् ॥

(कौ० २।१)

(३) भूतपूर्वमभूतपूर्वं वा जनपदं परदेशापवाहनेन स्वदेशाभिध्यव्यवसनेन वा निवेशयेत् ॥
नदी शंखनगुण्टिदरीसेतुबन्धशास्मली शमीक्षीरवृक्षान्तरेषु सीम्नां स्थापयेत् ॥
शत्रुकवकप्रायं कुलशतावरं पञ्चशतकुलपरं ग्रामं क्रोशद्विक्रोश सीमानमन्योग्यारक्षं
निवेशयेत् ॥

(कौ० २।१)

idleness and have, for decades, blighted the life of the rural population of the country. Kautilya gave his attention to the planning and regulation of life both in the villages as well as in cities. No area of janpada was to suffer for amenities of life at the cost of another. Minute regulations for a healthy and happy life both in the rural and urban areas of the country are contained in Kautilya's Arthashastra¹.

The worst evil of villages and also of many cities is the insanitary condition and unscientific building of houses. Fire plays havoc in many villages of India in the summer season. The problem of planning towns became more acute after partition, because millions of refugees came across the border to the big cities of Northern India and the Kaban towns of Uttar Pradesh. The problem is really not related to one city or few cities only, but it has got to be tackled by towns all over the country. Though the emphasis so far has been on planning of towns, the government cannot neglect the villages. Planned village and town life is the only way out for eradicating many social and economic evils of the people. Community projects and national extension service have to occupy a place of central importance and administrative efficiency in the planning and welfare of the rural areas. It has to be recognised from the beginning that the plans for districts and villages have to be fitted within the frame-work of plans for big cities. It is interesting to note here the definition of city or 'Nagar' as given by Rishi Markandeya in the Mahabharat. He has pointed out that a 'Nagar' or a town is a place where learned people, men of character, wisdom and austerity loving intellectuals stay. Whether it be a Vraja or a forest, it would be called a Nagar if inhabited by learned scholars. Mere construction of ramparts, several gates and palatial buildings does not adorn the cities unless inhabited by scholarly people². This criterion should not

(१) वास्तुकप्रशस्ते देशे नदीसङ्गमे ह्रदस्य बाधितोपस्थायुक्ते सरसस्तटाकस्य वा वृत्तं दीर्घं
चतुरश्रं वा वास्तुकवशेन प्रदक्षिणोदकं पश्यपुटभेदनम संवारिपथाभ्यामनुयेतम् ॥

(को० २।३)

सीमावरोधेन ग्रामाद्यं कृष्ठाकृष्टस्थलकेदारारामवण्टवाटवनवास्तुर्चास्यदेवगृह
सेतुवन्धमशानसन्नप्रपा पुण्यस्थानविद्योतपथि संस्थानेन क्षेत्राद्यं; तेन सीमां क्षेत्राणां
च नयद्वारण्य पथिप्रमाणसम्प्रदानविक्रयानुग्रह परिहार निबन्धान् कारयेत् ॥

(को० २।३५)

(२) वेदाद्या वृत्तसम्पन्ना ज्ञानवन्तस्तपस्विनः ।

यत्र तिष्ठन्ति ते विप्रास्तस्मान् नगरं नृप ॥

शेषे अगले वृष्ठ पर

only be true of a modern town in India, but it should also be applicable to the newly re-constructed villages of the country.

The New Approach

The patterns of plans vary, however, with the type of political and economic set-up. The ideas of social and economic change continue to grow as experience is gained and impact of new forces felt. As planning is essentially a way of organising and utilising resources to maximum advantage, the impulse to proper planning of towns and villages has to be canalised in the right direction. There are two approaches, direct and indirect for implementation of any measure on town and country planning. The direct approach which is normally described as 'positive planning' consists of the public authority entrusted with the task of acquiring land and undertaking development of the town. The indirect approach which is referred to as 'Regulative Planning' regulates the use and mode of development on privately owned lands by enforcing restrictions through statutory town planning scheme for particular areas. Positive planning, though obviously a great advance over regulative planning, has its own limitations which necessitates the need for comprehensive powers for regulative planning. In the present circumstances of the country, it seems essential that town and village planners must adopt both positive and regulative measures and prepare the public mind to receive new and healthy ideas.

At the recent Jaipur seminar on town and village planning problems, ways and means were discussed of making the village a better place to live in than it is to-day. The Governor of Rajasthan, who inaugurated the seminar, drew pointed attention to the drift of the village population to urban areas and asked the delegates to examine the question of having satellite townships and garden colonies to ease over-crowding in the older cities. If the villages are well planned and provided with modern amenities like sanitation and protected water supply and with means of recreation and entertainment, there is no reason why people should leave them for a life of misery in the slums of congested cities; some of those who have left might even be attracted back to their villages. The problem of rural unemployment is of course one of the causes that have led to the increasing

वृजं बाध्ययवारणे यत्र सन्ति बहुभुताः ।

तत् तल्लगरमित्याहुः पार्थतीयं च तद्भवेत् ॥

प्राकारेण च पुरद्वारैः प्रासादेन च पृथग्विधैः ।

नगराणि न क्षीयन्ते ह्येनानि ब्राह्मणोत्तमैः ॥ (महा० वनपर्व अ० २००)

migration of people from villages to towns. The increasing stress on higher agricultural production and the development of village and small-scale industries should lead to a decline in urbanisation. The expansion of towns and cities to accommodate a growing population has been haphazard, but there has been some effort at planning there. The villages, however, have been left to look after themselves, and little attention has been paid to the problem of rural housing, which is a problem of vast proportions, because over eighty per cent of the Indian population lives in villages. The Planning Commission has said that having regard to the limitation of financial resources, a satisfactory programme of rural housing in the short period cannot be envisaged. But it has also pointed out that since the pressure of population shifts towards cities, the slum problems resulting therefrom cannot be solved without ameliorating rural living conditions. Improvements in the standard of rural housing should be effected primarily by utilizing labour and materials locally available, with only a modicum of technical assistance. "Aided self-help" was recommended as a means of improving existing conditions, "without prematurely advancing beyond the living habits and means of villages." This caution was necessary because of the temptation of town and village planners to draw up grandiose schemes which cannot be put into practice. Because the planning of cities and towns is intimately connected with village planning, Mr. Walter George, president of the Indian Institute of Town Planners, who presided over the seminar, pleaded for co-ordination in respect of town and village planning. He also cautioned against concentration of power in official hands. The people's direct interest in this matter should be awakened ; they should have a voice in planning and control of their neighbourhood. At present there is too much of outside advice and assistance, with the result that local initiative is stifled. Houses and roads best suited to the real needs of the villages cannot be planned realistically without the co-operation of the villagers themselves.

CHAPTER XV

SUMMARY OF CONCLUSIONS

Physical environments of a nation have a profound influence on its character and economic development. In India, the gifts of nature are bountiful. Her geographical conditions are so favourable that she has occupied a central position in the Eastern hemisphere. The Himalayas have provided immense opportunities for her economic development. The varying degrees of temperature, the whimsical but generous monsoons, the wonderful fertility of the soil and great density of population make up a techni-coloured picture of India's economy. The diversity of the social life of the people coupled with variation of political and cultural standards enrich our economic concepts. Our ancient literature bears out the fact that India presented an ideal form of republics which were founded on economic, political and social considerations of human life. India has a rich cultural heritage. Her history stretches back thousands of years in the hoary past.

The whole field of human knowledge in ancient India was divided in four categories in which 'Varta' formed a significant part. The sovereign had to learn 'Varta' with special attention to agriculture, cattle-rearing and trade. The application of the principles of 'Varta' within the state by competent men was the primary duty of the sovereign. A correct estimate of India's culture and civilisation can be formed by looking into the vast literature bequeathed to us by our ancestors. The Vedas, Smritis, Epics and Kautilya's Arthashastra give us the clue to the social, political and economic philosophy which enabled Indians to attain great heights in all walks of life. Though India was subjected to foreign rule, yet her spirit of freedom was kept alive by reminiscences of her ancient glory. Let us believe that by recapturing the creative principles of the past and by careful exploitation of our vast natural resources, we shall move on to occupy a leading position in the world. Keeping in view our rich heritage and healthy traditions, we can march ahead by means of five-year plans and take the nation to a position of progress and prosperity for all in the society.

The social structure in ancient India was distinguished by the 'Varna-Ashram' principle which classified individuals according to their worth and age. This classification created a sort of adjustment and collaboration in the midst of diversity. The 'Varna-Ashram Vyavastha' implied the fundamental principles of planned education, planned family life, planned defence and a planned economy. The joint family system provided a type of social insurance to all deserving members of the family and the family was characterised by affectionate relations between its members. Women had an honoured place in the society and took part in social functions. The system of education played an important part in moulding an individual's character. Life of both the teacher and taught was distinguished by the ideals of service, study, simplicity and self-control. It must be noted by leaders of the world that the way out of economic greed and international brutality is not violent revolution or paper legislation but the proper development and proper manning of schools and universities directed intelligently to the re-construction of human character. The keynote of a social philosophy and the criterion of judging social institutions has to be their effects upon human character.

The scheme of life envisaged by our ancient Rishis and the fundamental concept of *chaturvarga*—*Dharam*, *Artha*, *Kama* and *Moksha* aimed at a blend of realism and idealism. The Vedic outlook on life brought about a synthesis and integration of different extremes. The spirit of sacrifice for the sake of others and a philosophy of '*Sarvodaya*' were the characteristic features of Aryan polity and social order. Even now the road to the utopia of a classless and casteless society in India lies through a philosophy of '*Sarvodaya*' and avoidance of the extremes of capitalism and communism, spiritualism and materialism, as well as idealism and realism.

The state in ancient India was neither a bourgeois state nor a socialist state having monopolies of political and economic power but a welfare state which looked after the good of the people. There have been, from earliest times in India, certain codes of duties inspiring and regulating the lives of kings and rulers of men. Several hundred years before the birth of Christ, the *Rig-Veda* proclaimed 'In all that exists and in all that would yet come, man is and would be supreme'. Here, in India, for the first time in history, the ideals of legislative assembly, of representative government were conceived and recorded. Democracy, therefore, is not a new concept for India. Collective, general, political and national consciousness of the entire people was fully appreciated in ancient India.

Several references in the Upanishads and the Epics throw light on the concept of an ideal government in consonance with our best traditions. Such a government guaranteed a rational economic order where production could not be an end in itself but was ultimately subordinated to the primary needs of consumption. The system of village self-government was the foundation of the Aryan polity. Every village was a petty commonwealth and India was a great assemblage of such common-wealths. Government interference in the social and economic life of the people was permeated with a sense of social justice and respect for the dignity of the human being. The welfare of villages was promoted by the employment of appropriate administrative staff. India has won freedom after centuries of slavery and this freedom can be permanently strengthened, if the government follow healthy ancient traditions and expand their welfare activities throughout the country for maximising social good.

Agriculture formed important part of Vedic economy and was considered a dignified occupation. Classification of soil and suitability of seeds was fully realised. There are references in Vedic literature to systematic farming operations. Kautilya has discussed methods of preserving seeds, their timely sowing and watering, rotation of crops, means of irrigation and methods of manuring. The state, in ancient India, played an important part in the development of agriculture and took a certain share out of the agricultural produce for the services rendered by it. There was no landlord system in ancient India. The state was the ultimate landlord. Individual ownership of land was recognised and a cultivator could only be dispossessed of his property if he failed to pay king's taxes. The state dealt directly with the cultivators unhampered by middle-men.

The whole available land of a village was utilised in suitable proportions for purposes of farming, pastures and forests. Kautilya has made a distinction between crown lands and private lands, but land policy of the government, in general, aimed at giving hereditary rights to the cultivating classes. The national government of the country has taken inspiration from this ancient concept of land policy and has tried to give the benefits of three F's to the tillers of the soil by abolition of feudal landlordism.

The progress of our agriculture and the welfare of our people has been bound up with the welfare of our cattle. Cattle-breeding formed an important part of 'Varta'. Cows and bullocks have been the pivot of economic life in rural areas.

The sanctity of the cow has been mostly due to its inestimable value to the national economy of the land. In a predominantly agricultural country like India, a scientific system of animal husbandry has been most essential. There are several references in the Mahabharat and Kautalya's Arthashastra for careful feeding and breeding of cattle. Breeding of cattle and cattle census was very popular. Diseases of cattle were known and suitable measures were taken to cure them. India is deficient these days in the supply of milk to her growing population, because Indian cattle are under-nourished.

Cottage and small-scale industries have played an important role in our national economy since times immemorial. Ancient Indians practised all the arts and crafts needed by society. Among the important occupations, besides agriculture and animal husbandry, the first place was given to weaving both in cotton and wool. The Rig-Veda refers to the famous wool of Gandharian sheep and the Yajur Veda to the spinning and weaving of wool with a certain technique. The Ramayan refers to several types of artisans and craftsmen and the mahabharat contains descriptions of artistic designs of goods presented to kings. Kautalya has given exhaustive details of the craftsmanship of those days. Arts and crafts flourished in ancient India owing to state patronage. The king and people respected the artisan. During the Vedic days, the unit of organisation of cottage industry was the family, but during Kautalya's time artisans seem to have been organised under the guild system. The state arranged for the supply of necessary finance and raw materials to the artisans. Even to-day, there is a great scope for cottage and small scale industries in the economy of the country inspite of a programme of large scale industrilisation. The decentralised pattern of organised and progressive planning, formation of artisans' co-operatives and state patronage will go a long way in the revival of India's cottage industries.

Forests have a vital role to play in the welfare and development of a country. That is why scientific preservation of forests was one of the chief characteristics of ancient Indian civilisation. The superintendent of forests, in the days of Kautalya, looked to their commercial exploitation. Kautalya believed that mines were the source of treasury and suggested their careful exploitation. He has given the essentials of a sound mineral policy indicating the necessity of the employment of qualified technical personnel for conduct of mining operations. His indications for ascertaining deposits of different kinds of minerals are exhaustive

and surprising. The technique of refining metals and removing their impurities has a value of its own for experts in mineralogy. Kautalya has given suggestions for mining industrial ores and precious metals, but no mention is made of coal and petroleum—the two important industrial fuels of modern times. The only inference is that they were not much in demand in those days, because industry was not organised on the large scale basis and factory production was unknown.

A philosophy of working throughout life is very old in India. The Vedic hymns indicate an active life of hard work for hundred years. The dignity of labour has been appreciated in our ancient literature. Sometimes, workers in the industry need not only financial incentives in the form of higher wages but non-financial incentives also. Shukracharya has given indications of such non-financial incentives. He has also discussed the fundamental basis for determination of wages and the concept of a minimum or living wage. Manu and Kautalya have discussed ways for regulation of wages and the settlement of disputes between employer and employee. Division of labour is recognised by the Vedas, the Mahabharat and organisation of workers in the form of guilds existed in the days of Kautalya. The ancient state, being a welfare state, cared for the welfare of workers and employees. A new labour policy and philosophy with incentives—financial and non-financial—is needed for the country to maximise our agricultural and industrial output. In such a policy, both employers and labourers should advance in mutual respect, mutual understanding towards mutual prosperity.

Trade, from the earliest days, has been one of the great up-builders of economic well-being of the human race. There are references in hymns of Rig-Veda for trading in distant lands. Ancient India had all types of trade—internal and external—and the merchant had an important place in the national economy of the country. Partnership in business was recognised by Smritis. The chief articles of export and import in the days of Panini and Kautalya were different from those of modern times. It appears that tea did not form part of the articles of export in ancient India which now earns over rupees hundred crores of valuable foreign exchange for the country. Manu has given clear directions for morality in trade and pleaded for cardinal principles of sound trading. According to the Arthashastra of Kautalya, the department of commerce required a large number of superintendents and markets were incharge of a government officer called 'Panyadhaksha'. Rates were controlled and cornering of supply

was prevented. Prices of ordinary goods were fixed and proclaimed daily by the officials. Weights and measures were subject to inspection after every six months as directed by Manu.

All forms of transport worked as the life blood of trade and industry of the country. Kautalya attached a great importance to roads from a military and economic point of view. Merchandise on the roads was carried by carts, camels, asses and human porters as well. The superintendent of chariots attended to the construction of chariots which were made of different types. For crossing oceans and big rivers, the Rig Veda refers to special types of boats. The Mahabharat also refers to a mechanically propelled boat which was capable of weathering storms on high seas. During the days of Kautalya, the department of navigation was a separate one charged with the duty of protecting travellers against river and sea pirates, of providing and maintaining harbours, ferries and bridges and regulating all water traffic. The duties of the superintendent of ships indicate the presence of a vast and valuable commerce with adequate means of transport and shipping regulations. There is no reference to air transport in Kautalya's Arthashastra, but air transport cannot be regarded as a phenomenon of modern times only. The Vedas and the Epics indicate the presence of air transport for long distances to be covered in short time. Ancient ideals of morality in trade have a lesson for Indian traders and manufacturers for purposes of 'exports promotion programme' of the government these days.

The concept of wealth in ancient India included a co-relation between wealth, want and welfare. During Vedic days, wealth was counted in cattle (specially cows) horses, heroes and good man—power in general. Several hymns of the Rig and Atharva Veda confirm this concept of wealth in those days. The concept of wealth as given in the Mahabharat is of a more comprehensive nature. Kautalya has referred to diminution of gold and grains as loss of wealth. He placed special emphasis on gold and grains but included other valuable possessions in his concept of wealth. Wealth is a relative term and future generations of India and the world over may conceive of wealth in a different way if space control and inter-planetary flights become a regular feature for human race on the Earth.

There was individual liberty to earn and accumulate wealth in ancient India. According to Manu and Vyasa, there are

several ways of earning and acquiring wealth for an individual. Productive activity through investment of capital and labour was regarded essential for earning and accumulating wealth. Speculation and gambling were discouraged as a means of acquiring wealth. Kautalya has very clearly suggested that 'wealth will pass away from that childish man who inquires most after the stars; for wealth is the star for wealth, what can the stars do. Capable men certainly secure wealth after a hundred trials. Wealth is bound by wealth just as elephants are bound by counter-elephants'. The acquisition of wealth, the process of its production, consumption and distribution was not supposed to be an end in itself but a most important means to the main objectives of life—achievement of four purusharthas. According to the Mahabharat, the wealthiest man is he who keeps his mental balance in pleasure and pain, prosperity and adversity and is indifferent to the worries of past, present and future. Accumulation of wealth was thus to be accompanied by a sense of moral and social welfare.

The productive organisation of the ancient Aryan society had its own ideology and form. It was an ideology in which moral values predominated. The moral law was a guarantee of protection against starvation and for equitable distribution of wealth. The economic philosophy of Rig Vedic hymns suggested an equitable distribution of food resources of the country. Social and economic life was free from clash of interests and the class-war of Marxian theory did not arise. The criterion to determine wages was justice based on humanitarian considerations. The return which each group received for its services was not a matter of natural law but of equity and justice. Landlords and capitalists could not oppress cultivators and borrowers. Law givers in ancient India realised that capital contributed to the production of wealth and hence Dharam Shastras justified interest on loans. Manu has given detailed instructions for the regulation of rates of interest. Compound interest was forbidden by Manu but permitted on certain considerations. Both Manu and Kautalya forbade exorbitant rates of interest.

Analysis of profits given by Kautalya, in case of an adventure against an enemy, is of a different type than that made in case of profits of business undertakings. Obstructions to profits discussed by Kautalya confirm the view that profits are the reward of purely entrepreneurial functions which cannot be performed by paid employees. The changing world offers limitless opportunities to the far-sighted, daring and clever

entrepreneurs to make profits by turning the facts of the situation in their favour.

The Atharva Veda directs to earn wealth with hundred hands but to distribute the same with one thousand hands. Disparities between the rich and the poor and between advanced and under-developed countries can be reduced by adhering to directions of the Atharva Veda. Though several hymns of the Vedas suggest equality of wealth distribution, yet they do not support absolute equality because of the basic fact that men are not equal in their capacity, calibre, character, aptitude and outlook.

The exchange of commodities on the principle of barter seems to have been in vogue from very early times. Bhishma Pitamah explained to Yudhishtira the chief characteristics of exchange by barter and pointed out that such exchanges have been the old traditions of sages and other good people. But such exchange could be regarded as justified only when they were voluntary and not forced on any party to the exchange. No proper social organisation could exist in the absence of some form of money. Though cow was recognised as a unit of value for purposes of exchange in Vedic days, yet there were other recognised units of value such as 'Nishka', 'Shatman' and 'Pana'. There are references in Vedic hymns and in the Mahabharat to 'Nishka' as a sort of gold coin used in those days. An analysis of the relative measures of copper, silver and gold given by Manu seems to be the basis for coinage of both standard and token coins of the country. According to the Arthashastra of Kautilya, the superintendent of mint was to manufacture silver coins made up of four parts of copper and one-sixteenth part of any of the metals—tikshna, tripu, sisa and anjana. The king reserved the right of coining in silver and copper which was executed by his officials on behalf of those who brought their raw metal. Silver coins were to be manufactured in units of a 'pana', half a pana, a quarter and one-eighth pana. Copper coins were to be in units of a mashaka, half a mashaka, Kakani and half a kakani. The examiner of coins was to regulate currency both as a medium of exchange and as legal tender admissible into the treasury. Manufacture of gold coins has not been referred to by Kautilya. The use of the 'Shatman' either as a gold or silver coin gives us a clue to some sort of decimal coinage in ancient India which is supposed to be the simplest form of coinage making calculations quick and easy. The system has been adopted in 105 out of about 140 countries that issue their

own coins. It has received attention of the government of India as well. Paper and credit money did not play as important a part in ancient Indian economy as they do in the modern mechanism of exchange in the country. But letters of credit and the hundis helped travellers to get convenience in cities and towns where they went on business or religious trips.

Different classes of modern banks were unknown in ancient India, but the system of indigenous banking is very old in our country. It has been in force for many centuries before the science of banking became an established fact in Western countries. Though the ancient methods of banking differed from the European ideas of banking, yet they rendered immense service to the trade and industry of the country. The codes of Manu and Yagnavalkya have laid down rules for honesty, punctuality and responsibility in repayment of debts borrowed. Kautalya has emphasised the need for public control, regulation and supervision of the credit sector of national economy. He has pointed out that the nature of transactions between creditors and debtors was always to be scrutinised as it was of vital national importance. He has discussed the rates of interest to be charged for different kinds of loans. There was no nationalisation of banking business in ancient India but the necessary control on it was exercised by the state.

A rich treasury and ample reserve funds were regarded as essential departments of the State. Manu, Vyas and Kautalya have emphasised the importance of a sound treasury for national welfare. Kautalya has given an exhaustive list of the form of economic activity which yielded substantial revenue to the exchequer. There are many references in the Mahabharat to show diverse activities of the state in the realm of 'Varta' for the purpose of filling its treasury. The earliest and most prevalent form of government interference with the economic life of individual and business enterprises has been taxation. Taxes were regarded in Hindu politics as the wages of the king for the services of administration. A single tax has been beyond the sphere of practical finance and was never advocated in ancient India. The multiplicity of taxes is clear from the code of Manu and the Arthashastra of Kautalya. The system of land tax was a very popular source and was generally paid in kind. Smritis lay down no uniform rate as regards land tax and the variation seems to be due partly to the quality of land in question and partly to the different needs of governments in different times.

The purpose of all taxation, in ancient India, was the welfare of the people. Certain sound principles of taxation were always kept in mind and taxes were to be levied in proper place, proper time and proper form. They were not to be realised by a painful method and the deserving classes of people were exempted from taxation. Such exemptions have been recommended by Manu, Vyas and Kautilya.

The king could raise additional finance in abnormal times both inside and outside the country. But he had to explain to his people the gravity of the situation and to win over their confidence for raising extra-ordinary finance. Vyas, Shukra and Kautilya have given suggestions for replenishment of the treasury to meet emergencies. The extent of state activity was very wide and included protective, administrative, social, economic and commercial functions. Public expenditure was incurred for defence and maintenance of law and order. An equal emphasis was placed on nation-building activities. The ancient Indian state was also interested in a number of productive enterprises and the problems of a balanced or surplus budget were considered more important. The Mahabharat throws light on this aspect of financial administration.

Kautilya has given a detailed classification of income and expenditure of the state and has suggested scientific maintenance of accounts. He has pointed out forty ways of embezzlement of funds. He says, "It is possible to mark the movements of birds flying high up in the sky but not so is it possible to ascertain the movement of government servants of hidden purpose". He believed that men are naturally fickle-minded and, like horses at work, exhibit constant change in their temper. Hence, their activities were fully to be scrutinised. Those who increased the king's revenue instead of eating it up, were to be rewarded and made permanent in service. There is, no doubt, a paramount need to increase public outlay on social welfare in our country, but there is a greater need for an anti-waste campaign and getting the full value for the money spent. Kautilya's instructions should impress the planners and finance ministries in the country to set standards of austerity, efficiency, regularity and economy.

Peace is vital for national and international progress. All the great thinkers of India, through the ages, have tried to promote peace and avoid struggle. The munitions for peace were supposed to be justice, honesty, mutual understanding and

respect for the rights of others. But there arose occasions when peace could not be maintained at any price and the greed, hatred, jealousy, perfidy of the evil-minded persons forced a clash of arms. The great battles of the Epics were fought and fought valiantly to a victory by the righteous persons when all efforts for making peace failed. Even to-day, we are labouring assiduously in the cause of peace, but there can be no peace in the world unless there is peace in the hearts of men. Real peace rests on peace of mind.

The challenge of war, in ancient times, was accepted out of sheer necessity to curb the craft and unscrupulousness of the evil doers and to establish the rule of right over might. Under the circumstances, all resources, in men, money and material, were mobilised to punish the guilty. There were certain canons of warfare as discussed by Manu and Bhishma, but 'Kuta Yuddha' was also resorted to as suggested by Shukra and Kautilya. A description of the defence of Dwarka against king Shalva, as given in the Mahabharat, brings to our mind the adoption of scorched earth policy by Victorious Russians in the last war. Bhishma suggested to Yudhishtira an all-out effort to fight the enemy on all fronts in case a war broke out.

Kautilya has discussed very exhaustively the fundamentals of a policy concerning peace and war. He has given classifications of an open, treacherous and silent battle to gain victory. He has also given indications about neutrality and concluding a treaty of peace with the enemy. For restoration of peace in a conquered country, Kautilya has suggested that the conqueror should cover the enemy's vices with his own virtues, strictly observe his own duties, bestow rewards, remit taxes and consult leaders of people to maintain peace. He should bestow special rewards on those who deserted the enemy for his cause and should adopt the same mode of life, the same dress, language and customs as those of the people of the territory. He should hold religious life in high esteem. Learned men, orators, charitable and brave persons should be favoured with gifts of land and money. He should afford help to miserable, helpless and diseased persons and compel born thieves, undesirable persons to change their habitations often. The inference of this analysis is that leaders of people in ancient India loved peace but advised going to war when it became necessary. Our army has been described, by the defence minister, as the Gandhian army whose aim is peace and not war. But in case an emergency arises, it will have to defend country's liberty, honour and glory.

The art and science of town planning dates back to the oldest civilisation. In every civilisation, planned growth of towns, according to prevalent conceptions, has taken place from time to time. Such examples are scattered all over the ages in India. The Indian science of town and village planning is very old. The sites of the villages were carefully chosen according to certain principles. During Kautalya's time, there was a definite grouping of villages both for economic purposes and for national defence. Town planning, in ancient India, was based on certain basic rules such as the orientation of main streets, the sub-division of the city area and the width of the streets. The city, specially the capital city, was the creation of careful fore-thought and planning. Elaborate regulations were laid down for proper sanitary arrangements and to prevent such calamities as the out-break of fire. The principles involved in town planning change with times and requirements of the people. Maintenance of urban sanitation constitutes one of the most difficult problems of modern civilised life. There are about 54 million houses in rural areas which need re-conditioning and re-building. Preparation of master plans for all big cities is essential, if the dangers of haphazard and unplanned growth are to be met. Suitable measures have to be adopted by the town and village planners to prepare the public mind to receive new and healthy ideas in this sphere keeping in view the ancient traditions as laid down by Manu, Vyas, Shukra and Kautalya.

The conclusion, therefore, is that consideration of morality in economic behaviour was of fundamental importance in ancient times and the welfare of mankind depends on this even to-day. Our ancient thinkers rejected the philosophy of class war and class hatred. 'Sarvodaya' or welfare of all has been the guiding principle of economic behaviour in our country. Sacrifice of human beings for the sake of 'isms' is alien to our thought and culture. On the other hand, our thinkers have emphasised the view that 'isms' should be judiciously mixed-up for the sake of human welfare. That is why Mixed Economy under a welfare state was the order of the day thousands of years back in India. Our thinkers also upheld the slogan of equality. The objective of equality was not to be achieved by sword but it was to be implemented by persuasion, mutual understanding and social consciousness. It would, therefore, not be an exaggeration to say that India had a sound social, political, economic system and a democratic set-up which was unique in the world.

पुस्तक सूची

१. ऋग्वेद	...	... भाषा-भाष्य-भाष्यकार श्री पं० जयदेव झा
२. यजुर्वेद	...	... " " " "
३. अथर्ववेद	...	... " " " "
४. वेदामृत	...	... श्री पाद दामोदर सातबलेकर
५. वैदिक सम्पत्ति	...	... पं० रघुनन्दन शर्मा
६. वैदिक ज्योति	...	... आचार्य वैद्यनाथ शास्त्री
७. वैदिक साहित्य	...	... श्री रामगोविन्द त्रिवेदी
८. ऋग्वेदादि भाष्य भूमिका	...	... स्वामी दयानन्द
९. सत्यार्थ प्रकाश	...	... " "
१०. धर्मशास्त्र संप्रह	...	...
(भाषा टीका समेत)	...	... श्री साधुचरणप्रसाद जी
११. मनुस्मृति	...	... पं० गिरजाप्रसाद द्विवेदी
१२. वैदिक काल का इतिहास	...	... आर्य मुनि
१३. उपनिषद-अङ्क	...	... (कल्याण)
१४. गो-अङ्क	...	... (कल्याण)
१५. नारी-अङ्क	...	... (कल्याण)
१६. महाभारत-अङ्क	...	... (कल्याण)
१७. महर्षि दयानन्द और महात्मा गांधी...	...	... पं० धर्मदेव जी सिद्धाग्तालंकार
१८. उष ज्योति	...	... डा० बासुदेव शरण अप्रवाल
१९. पाणिनिकालीन भारत	...	... " "
२०. कला और संस्कृति	...	... " "
२१. माता भूमि	...	... " "
२२. भारत की मौलिक एकता	...	... " "
२३. पृथ्वी पुत्र	...	... " "
२४. रामायण	...	... (बाल्मीकि)
२५. रामचरितमानस	...	... (तुलसीदास)
२६. महाभारत	...	... (गीता प्रेस, गोरखपुर)
२७. श्री मद्भगवत गीता	...	... (गीता प्रेस, गोरखपुर)
२८. मार्क्सवाद और रामराज्य	...	... श्री करपात्री जी
२९. कौटिलीय अर्थशास्त्र	...	... श्री पं० गणपति जी शास्त्री
३०. कौटिलीय अर्थशास्त्र	...	... श्री पं० गङ्गाप्रसाद जी शास्त्री
३१. कौटिल्य के आर्थिक विचार	...	... श्री प्राणनाथ बिस्मालझार
३२. समाजवाद	...	... श्री सम्पूर्णानन्द जी

३३. व्यक्ति और राज ...	... श्री सम्पूर्णानन्द जी
३४. चिह्निलास ” ”
३५. प्रथमजा ...	... डा० मुन्शीराम जी
३६. शुक्रनीति (भाषा टीका समेत) ...	पं० मिहिरचन्द्र जी कृत
३७. शुक्र की राजनीति ...	... डा० इयामलाल पाण्डेय
३८. आणव्यनीति (भाषानुवाद सहित) ...	पं० बिहारीलाल काव्यतीर्थ
३९. गो हत्या या राष्ट्र हत्या ...	... श्री प्रकाशवीर विद्याभास्कर
४०. गो कर्णानिधि ...	... स्वामी दयानन्द
४१. मध्यकालीन भारतीय संस्कृति ...	... श्री गौरीशङ्कर हीराचन्द ओझा

पत्रिकाओं की सूची :-

१. वैदिक धर्म	९. सोवियत भूमि
२. वेदवाणी	१०. तपोभूमि
३. आर्यमित्र (ऋष्यंक)	११. वसुधा
४. आर्थिक समीक्षा	१२. गुरुकुल पत्रिका
५. सर्वोदय	१३. गांधी मार्ग
६. मानवधर्म	१४. योजना
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